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### **Note of Appreciation**

Canada owes the success of its statistical system to a long-standing co-operation involving Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without the continued co-operation and goodwill of all Canadians.



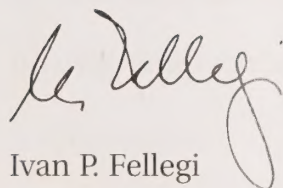


## FOREWORD

*The Canada that will enter the 21st century and embark on a new millennium is a country caught up in an unprecedented pace of change. Ever-increasing technological advances have transformed the way we work, the way we live, the way we talk to one another, even the way we learn.*

*The challenge of describing these changes is an important one. There is a great need, in this world of ours, for knowledge, and for a sense of where we are. Much like a compass, the **Canada Year Book** hopes to provide both. With a clear and unequivocal look at the social and economic life of the country, it frames our statistical base with a collection of stories, essays and photographs.*

*As a contribution to a greater understanding of our country, and as a reference point at the start of the new millennium, I am pleased to recommend it to all our readers.*



Ivan P. Fellegi

Chief Statistician of Canada





Perhaps one of this country's best kept secrets, the **Canada Year Book** first appeared in 1867, the year of Confederation, as a compilation of basic statistics and news on the social and economic life of the time. It has been with us ever since, and its many volumes may be found in the stacks of libraries across Canada—a consistent record, over time, of the social and economic life of this country.

In this 1999 edition, readers will find the approach to the information consistent with the previous edition. There are 15 chapters which cover all elements of national activity and there are about 240 tables which accompany the chapters, supporting the analysis with the most current data available.

Whether you are a newcomer to the **Canada Year Book**, or a frequent user, we offer the following guidelines to accessing the information within this publication.

A good starting point is the **index**. The index for this edition has been refined to allow readers an effective guide to both the text and tables. An index entry with a small, annotated “t” will direct you to a table dealing with that topic. For a more general overview, the **Table of Contents** will point you to any of the book's 15 chapters, organized under four general headings: the Environment, the People, the Economy and the Nation.

Although the number of chapters is down one from the 1997 edition (Economic Conditions and Canada in the Global Economy have now been combined), the amount of information remains constant, and the entire Year Book has been revised and rewritten to reflect the changes which have occurred in Canada over the last few years.



*At the end of each chapter, readers will find a source page that offers a selection of the publications and agencies consulted as part of the research for each chapter. The source page is followed by a selection of the data tables which support the analysis of each chapter; they may feature everything from highlights of the gross domestic product to information on how Canadians exercise. To preserve the reference value of the Year Book, all tables have been updated to the most recent information available at the time of publication.*

*This edition of the Year Book also features more than 125 photographs, which showcase the land, people and art of Canada. Although most of the source information appears with the photographs, in the case of the chapter openers and a few selected images, additional information is presented in Appendix C.*

*There are three other **appendices** as well as a map of Canada. Appendix A lists Statistics Canada's regional reference centres. Appendix B presents a metric conversion chart, and Appendix D provides copyright information on selected quotes found throughout the text.*

*The **map** of Canada can be found on the inside back cover of the book, and is reflective of the latest geopolitical configurations.*



## ACKNOWLEDGEMENTS

*The contributions to this book have been as diverse and colourful as the country about which it is written. I am honoured to have worked with Laurel Hyatt, Production Manager and Senior English Editor, whose quiet diligence and sharp sense of humour set a tonic pace for the entire team. I am equally grateful to Louise Saint-Pierre, Senior French Editor, whose high standards of editorial excellence brought power and clarity to the French edition of the Year Book.*

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*Special thanks to the editorial teams who worked to infuse the statistics with life, creating a book that is meant to be read and enjoyed. On the English team, headed by Laurel Hyatt as Senior Editor, were Lynn Atkins, Nicole Baer, Pat Buchanan (indexer), Kevin Burns, Mark Foss, Liz Hart, Jocelyn Harvey, Susan Hickman, Sarah Hubbard, Bill Jeffery, Yvonne Jeffery Hope, Mary Jean McAleer, Chris McKillop, Bruce Nesbitt, Tom New, Marlene Orton, Laura Paquet, Paul Paquet, Geoff Poapst, Penny Stuart and Gerry Toomey. On the French editorial team, headed by Louise Saint-Pierre, were Nicole Castéran, Valérie Catrice, Monique Dumont (indexer), Nancy Fontaine and Andrée Lacroix. Excellent translation services were provided by Official Languages and Translation Division, thanks to Sylvette Cadieux. A very special thanks also to Jacques Lefebvre and Valerie Peters for their subject matter expertise and to Diane Leblanc for technical data expertise. Many thanks to Nadia Beckford and Monique Cameron for updating the tables.*



*The Year Book comes together under the guidance of a small editorial team. Special appreciation must go to Maxim Davidson for superb work as Production Co-ordinator and to Nicholas Thorp, for diligent research, as well as to Susan Hickman and Brigitte Angrignon for their timely help. Many thanks also to Andrew Neish for daily assistance.*

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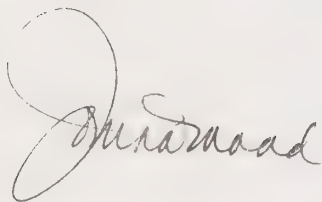
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*Much appreciation is extended to Kathryn Bonner, Mary Rigby and John Whitton who have taken on the challenge of marketing the **Canada Year Book** in the somewhat rigorous climate of the 1990s, with enthusiasm and commitment. We are also grateful to the efforts of all colleagues who work “behind the scenes” throughout Statistics Canada’s Regional Reference Centres.*



*The **Canada Year Book** relies on the expertise of a team of statisticians, demographers and economists, both internal and external to Statistics Canada, who act as our referees. We are above all grateful to Michael Bordt, Gary Catlin, Philip Cross, Jean Dumas, Andrew Kohut, Jean-Robert Larocque, Paul McPhie, Doug Norris, Steve O'Brien, Gordon Priest, Paul Reed, Jim Seidle and Michael Trant.*

*Our gratitude and appreciation also go to the members of the Statistics Canada library, who are really the "Sherpa guides" of this project and who have supported our efforts with unfailing courtesy and diligence.*

A handwritten signature in black ink, appearing to read 'Jonina Wood', with a large, stylized initial 'J'.

Jonina Wood  
*Editor-in-Chief*  
Canada Year Book



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# The Environment

*The Land*

*The Legacy of Settlement*





## *The Land*

### **C h a p t e r**

*When the English poet Rupert Brooke visited Canada in 1913, what impressed him most about this country was its “fresh loneliness.” “There is no one else within reach,” he wrote. “There never has been anyone; no one else is **thinking** of the lakes and hills you see before you.”*

*The sense of being the first human observer in a land no other person has ever imagined is never far away in Canada: it can come upon us just beyond*



the city lights or out the back door of the cottage. Only 10% of Canada has ever been permanently settled. Nine out of 10 Canadians live in cities and towns that hug the southern border with the United States and vast reaches of the country bear few human footprints. Canada is the second largest nation in the world, topped only by the Russian Federation. It covers nearly 7% of the Earth's surface, but has only half of one percent of its population. The 1996 Census found that there were nearly 30 million people in Canada. In contrast, Mexico City alone has 17 million inhabitants.

Space and silence, abundance and emptiness: the paradoxes of Canada register deep within the Canadian psyche. Canadian poet E. R. Scott felt their presence in the Laurentian Shield: "Inarticulate, arctic,/Not written on by history, empty as paper,/It leans away from the world with songs in its lakes/Older than love, and lost in the miles."

Canada stretches 5,500 kilometres from Cape Spear, Newfoundland, to the Yukon Territory–Alaska border. From Middle Island in Lake Erie to Cape Columbia on Ellesmere Island, it measures 4,600 kilometres. The southernmost point of Canada is at the same latitude as northern California.

Canada is organized by province and territory: there are 10 provinces and, with the creation of Nunavut on April 1, 1999, three territories. But nature has organized the land by ecosystems, which transcend these political boundaries.

There are, in fact, 20 ecozones in Canada, of which 15 are terrestrial and five marine. They are large geographical areas with their own distinctive combinations of climate, landform, soils, water features, plants, animals and people.



*Detail of a photo by Byron Harmon, Whyte Museum of the Canadian Rockies, Byron Harmon Collection, V263/NA71–153*

**Rocky Mountain hikers, circa 1914.**

## TRUE NORTH

Like a vast triangle, the Canadian North runs from the tip of Ellesmere Island in the Arctic Cordillera ecozone across the broader expanse of the northern Arctic to a wide base in the southern Arctic just above the tree line. The North covers an area more than four times the size of France. In diagonal bands, there are the mountains of the Arctic Cordillera with perennial snow and ice, the barren lands of the northern Arctic, and the southern Arctic with its tundra of moss and lichens.

Together, these three ecozones make up one-quarter of the total area of Canada, yet if you evenly spaced their inhabitants, each person would have some 85 square kilometres.

For thousands of years, the North has been home to Canada's Inuit people.

Here they have resided in a land of long, cold winters where the ground never really thaws. Their "walking habitat" has been the permafrost, a blanket of iced earth covering the land.

## Arctic Cordillera

The spine of the Arctic Cordillera is formed by a vast chain of mountains that runs from the Ellesmere and Bylot islands in the eastern Arctic to the Torngat Mountains of Labrador. Here, one catches a glimpse of what most of Canada may have looked like when it was covered with ice 15,000 years ago. Nearly three-quarters of the Cordillera is ice or exposed bedrock. On Baffin Island alone, more than 10,000 glaciers have been identified.

The Arctic Cordillera is a landscape of deep valleys merging along the coast with steep-sided fjords, which can rise more than 1,000 metres from the sea. Extreme cold, high winds and a lack of soil leave the upper reaches almost devoid of plants, animals and people. July and August are the only

months with mean daily temperatures above freezing. Except in the southerly region, it is very dry, typically receiving just 250 millimetres of precipitation a year. (That's the same amount that falls annually in the Sahara desert.) In or near the rich marine waters of the region, polar bears search for ringed and bearded seals or beached whales. The region is very sparsely populated. Pond Inlet and Clyde River—part of Nunavut as of April 1999—are two of the larger communities, each with just under 2,000 people.

The Arctic ecozones



Source: Natural Resources Canada.



## Northern Arctic

The northern Arctic is Canada's polar desert. It covers most of the non-mountainous areas of the Arctic islands and Nunavut, and a part of the Northwest Territories and northern Quebec. Snow can fall any month of the year here, and it usually stays on the ground from September to June. Only 20 days a year on average are frost-free. But the average precipitation in the northern Arctic is extremely low, about 200 millimetres annually. By way of comparison, the country's wettest city, Prince Rupert, British Columbia, receives 2,500 millimetres a year. The Arctic Bay holds Canada's all-time record for dryness: in 1949, less than 13 millimetres of precipitation fell there. Yet moss and lichen thrive in the polar desert; there are more than 600 recorded species.

Iqaluit on Baffin Island is the largest community in the northern Arctic, with a population of 4,200.

## Southern Arctic

Early European visitors to the southern Arctic, which includes the northern mainland from the Richardson Mountains in the Yukon Territory to Ungava Bay in northern Quebec, called these the "barren lands" because they were treeless. Tundra covers more than 58% of the land with its small flowering plants, mosses and lichens. Only in a few protected areas do dwarf trees grow. The bonsai of the North—creeping birch and dwarf willow a few centimetres high—may be over a century old.

But the clock strikes 12 twice a day in broad daylight during the Arctic summer. Plants can leaf and flower in a matter of weeks. In spring and summer, the tundra turns to green, and in the autumn to rich reds, oranges, purples and yellows. Purple saxifrage, with its five-petal blossoms, flowers in gravelly spots high up in the mountains, and pink moss campion blazes across much of Baffin Island.

The southern Arctic is home to the world's biggest concentration of free-roaming large mammals, the barren-ground caribou, which began migrating through this area after the last Ice Age ended. For countless years, the Dene and Inuit have used the rivers to reach the caribou, muskox and moose. Rankin Inlet on the west shore of Hudson Bay is the largest settlement, with a population of slightly more than 2,000.

## The Seas North and East

In the high Arctic, fjords, straits, channels and open waters surround the hundreds of islands in the Queen Elizabeth chain, with sea ice jammed fast to the land and many glaciers. A gigantic icecap floats near the top of the world in the Arctic Basin, which extends from the southern edge of the Beaufort Sea to the Arctic Ocean. Here, ice islands measure several square kilometres. Along the Atlantic coast, major ocean currents flow from Ellesmere Island to Newfoundland's Avalon Peninsula, on their way circling as many as 440,000 islands. Sailors have dubbed the stretches of ocean from Greenland to south of Newfoundland "Iceberg Alley."

These areas teem with sea animal and bird life. On the Atlantic coast, some 22 species of whale and six of seal co-exist, along with some of the world's largest sea bird colonies. Farther north, at the edges of the ice pack, are walrus, polar bears, beluga whales and seals. More than 90% of the world's population of Ross's goose have their nesting ground in the Queen Maud Gulf migratory bird sanctuary on the northern mainland tundra. This protected area shelters the largest variety of geese in North America.

Rich in mineral and hydrocarbon reserves, the North is Canada's last natural resource frontier, containing 59% of the country's estimated oil resources and 48% of its potential gas resources. But there has been little substantial development since the 1980s, due to low crude oil prices and global recessions.

## LAND OF LITTLE STICKS

Because of its spindly, sparse trees, the land of Canada's Athapascan people is sometimes called "the land of little sticks." This subarctic belt carries the Russian name "taiga," denoting the subarctic coniferous forest that begins where the tundra ends, and, globally, the northern edge of the boreal forest that runs from Siberia to Scandinavia and from Labrador to Alaska.

In Canada, the Taiga Plains, the Taiga Shield and the Hudson Plains stretch from the Mackenzie Delta in the Northwest Territories to the Labrador coast and cover almost one-quarter of Canada's land mass.

For plants and animals, Taiga regions are less biologically productive and diverse than more southerly areas, but they do have important mineral resources, including two major hydro-electric developments, Churchill Falls, Labrador, and La Grande, Quebec, and part of a third, the Churchill-Nelson development in Manitoba. So far, mining outfits have focussed on gold, silver, uranium and iron.

In 1993, prospectors looking for diamond deposits in Labrador found instead one of the world's richest deposits of nickel at Voisey's Bay on the Labrador coast. The deposit is estimated to hold 100 million tonnes of ore of excellent quality, making it the most significant mineral find in Canada in the last 20 years. The Norman Wells oil field, which lies under the Mackenzie River northwest of Yellowknife, is the nation's fourth largest producer of oil.

Yellowknife is Canada's coldest city in the winter; in summer, it's the sunniest. Night-time temperatures average nearly  $-30^{\circ}\text{C}$  in December, January and February. But from June to August, Yellowknife enjoys more than 1,000 hours of sunshine.

## Taiga Plains

At the centre of the Taiga Plains is Canada's largest river, the Mackenzie, and its tributaries. The Mackenzie drains a total area of 1.8 million square kilometres and is more than 4,200 kilometres long: almost the distance from Montréal to Vancouver. It begins at Great Slave Lake, ferrying water, silt and clay north past towns and fishing camps, right on to the Arctic Ocean.



Cree graves, Polar Bear Provincial Park, Ontario.



## *Beautiful Dreamers*

*From Martin Frobisher in 1576 to Sir John Franklin in 1845, a caravan of dreamers sought a shorter route to the riches of the Orient... across the top of Canada.*

*But it wasn't until 1906, after spending a couple of ice-bound winters in the Arctic, that the Norwegian explorer, Roald Amundsen, succeeded the first crossing across the top of Canada, by ship.*

*One of Amundsen's countrymen, Henry Larsen, also succeeded the trek, some 36 years later. Larsen, who became a Canadian citizen, navigated the RCMP schooner St. Roch from Vancouver to Halifax, between 1940 and 1942, using the Beaufort Sea, and returned by the same route in 1944. Larsen's voyages confirmed Canada's title to the Arctic Territories.*

*Today, the map of the North immortalizes the names of the many adventurers who fought dangerous, uncharted waters and ice jams, searching for the famed but elusive Northwest passage. Frobisher Bay. The Franklin Mountains. Hudson Bay. All bear the names of those beautiful dreamers.*

The Taiga Plains take in part of northeastern British Columbia and northern Alberta, but 90% of the region is located in the Northwest Territories. The Plains are bounded on the west by the foothills of the Mackenzie Mountains and on the east by two huge lakes, Great Bear and Great Slave. At more than 31,000 square kilometres, Great Bear is the biggest lake within Canada and the eighth largest in the world.

In this region, snow and freshwater ice persist for six to eight months. Black spruce trees grow on low-lying plains. Much of the area rests on continuous or patchy permafrost, and soils are often waterlogged.

Anthropologists contend that human settlement began here around 11,000 years ago, near the end of the last Ice Age, when the Paleo-Indian people began moving through an ice-free passage stretching down the Mackenzie Valley to western Alberta. By the late 18th century, the rivers and portages of the region were part of the fur trade route from Hudson Bay to the Mackenzie Basin. The Mackenzie Valley is one of North America's major migration routes for ducks, geese and swans coming to breed along the Arctic coast.

Limestone deposits in this region contain visible fossils of the marine creatures that lived here hundreds of millions of years ago. The remains of such early life forms helped create natural reservoirs of oil and gas in the pockets and cracks of sedimentary rock. Fossil fuel reserves are being exploited in the Liard Plateau and at the Norman Wells field.

The southern portion of this region is the home of the world's largest wood bison herd. It contains the only known nesting site of the endangered *Grus americana*, better known as the whooping crane, and the sprawling Peace-Athabasca delta, a wetland of global significance. Among the larger communities are Fort Nelson, British Columbia, with 4,400 people, and Hay River and Inuvik in the Northwest Territories, with 3,600 and 3,300 inhabitants respectively.

## Taiga Shield

Formed near the dawn of earth's geological history, the world's most ancient rocks are found on the Taiga Shield north of Great Slave Lake. This vast Shield, more than 1.3 million square kilometres in size, is one of Canada's largest ecozones. It lies on either side of Hudson Bay, with its eastern roots in central Quebec and Labrador and its western in the Northwest Territories, Nunavut, and northern Manitoba, Saskatchewan and Alberta. The Taiga Shield is, in fact, an ecological crossroad where the climates, soils, plants, birds and animals of two worlds meet—the Arctic to the north and the boreal forest to the south.

The Taiga is a study in bush, bedrock and water: millions of lakes and wetlands have been carved out by successive waves of glacial erosion and fill natural depressions in the underlying rock. Open forests of stunted black spruce and jack pine adjoin tundra shrubs and meadows. The region has the largest concentration of long, sinuous eskers in Canada, which are narrow ridges of sand, gravel and boulders. The abundance of water attracts migratory birds and a thriving animal life. The arctic tern finds the southern limit of its breeding range here. The smallest of the gulls, the tern, undertakes the longest known migration of any bird. Wintering as far south as the Antarctic and breeding north of the Arctic Circle, it makes an annual round trip of 35,000 kilometres.

Many communities have sprung up near mines or hydro-electric developments, including the largest centre, Yellowknife. Miners extract uranium in northern Saskatchewan, gold near Yellowknife, and iron ore in Quebec and Labrador. In 1991, diamonds were discovered in the Northwest Territories. The Ekati mine is estimated to hold about 6% of the value of the world's diamond production.

## Hudson Plains

Canada holds fully one-quarter of the globe's wetlands, or areas of land covered with water for part of the day or the year. The largest extensive wetland in the world is in the Hudson Plains ecozone, which runs along the western and southern shores of Hudson Bay and covers nearly 370,000 square kilometres. Almost three times larger than Nova Scotia,



*Willow Vessel and Ship, 1992/93, by Peter von Tiesenhausen, near Demmitt, Alberta.*

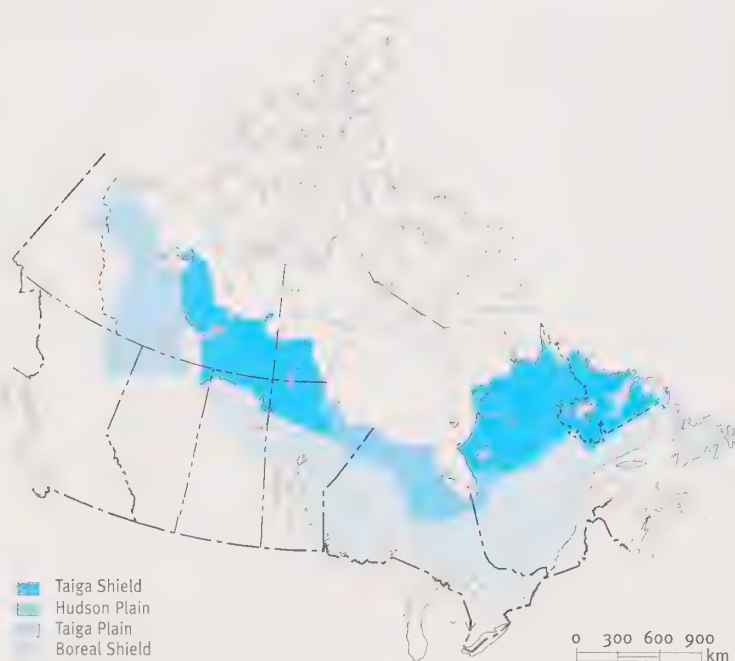


New Brunswick and Prince Edward Island combined, the Plains are centred in northern Ontario and extend into northeastern Manitoba and western Quebec.

During the last Ice Age, gigantic glaciers depressed the region of Hudson Bay, and ocean waters flooded areas up to 300 kilometres inland from the current coastline. When the ice retreated, drainage was blocked and large lakes formed at the margin. The flat terrain, impervious soil and poor drainage fostered wetlands: tidal flats, coastal marshes,

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#### The shields and plains



Source: Natural Resources Canada.

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peatlands and swamps.

For early explorers and fur traders like Médard Chouart Des Groseilliers and Pierre-Esprit Radisson in the 17th century, this was a gateway to the interior of central Canada and rich fur resources. But people living in the coastal fortifications set up by the Hudson's Bay Company faced long winters and insect-ridden summers. They called this the land of "bog and fog." Hudson Bay moderates the temperature of the lowlands during the warmer months. But when the bay is ice-bound, cold air lingering over the lowlands makes for chilly winters. The abundance of water in this region made possible the massive hydro-electric power development in James Bay, the southern appendix of Hudson Bay.

In summer, millions of snow geese, migrating from as far south as the Gulf of Mexico, nest and rear their young in the Hudson Plains. The larger communities include Moosonee, Ontario, with almost 2,000 people, Attawapiskat, Ontario, with 1,200, and Churchill, Manitoba, with slightly more than 1,000.

## THE SHIELD

"Geography is destiny," wrote John Jerome, "never more persuasively so than in Canada. [The] nation's central core, its defining fundament, is the Shield, [that] overturned frying pan of ancient granite that stretches from the Great Lakes to Hudson Bay and from the Labrador coast to the shores of the Arctic Ocean."

You may have run into the Precambrian Shield digging post-holes for your deck. You might be part of a road-building crew with no explosive powerful enough to blast it apart. This monumental sheet of rock buttresses almost two-thirds of Canada. An unyielding reminder of the elemental processes that created the Earth, most of the Shield took form in the earliest hours of the planet's history, well over one billion years ago.

Where primal rock meets northern forest lies Canada's largest terres-

trial ecozone, the Boreal Shield. The Boreal stretches across parts of six provinces from the east coast of Newfoundland to northern Alberta, covering more than 1.8 million square kilometres, or almost 20% of Canada's land mass. Appropriately, the boreal (or northern) regions of the world take their name from Boreas, the Greek god of the north wind.

The aerial view of Shield country offers stretches of endless water and trees. Not surprisingly, rivers and lakes in the Boreal Shield account for 22% of Canada's freshwater, and the timber-productive forest land makes up close to half the country's total. More than one-third of our hydro-electric capacity is located on rivers originating in or flowing through this region. Many large drainage basins have their headwaters here: the Nelson and Churchill rivers in Manitoba, the St. Lawrence in Ontario, and the Eastmain, Rupert, Nottaway and Broadback in Quebec.

Some 3,800 kilometres long, the Shield equals the distance from Halifax to Regina. Much of it is still wilderness. Over 80% is forested, mostly by white and black spruce, balsam fir, and tamarack in the north and some deciduous trees toward the south. Long, cold winters and short, warm summers are moderated by maritime conditions on the Atlantic coast and along the Great Lakes.

The first inhabitants of the Boreal Shield, the Beothuk, Algonquians and Iroquois, and later the Europeans attracted by timber, fur and mineral resources, knew this area was a storehouse of natural resources. Many communities in the region, including larger centres such as St. John's, Newfoundland, Chicoutimi, Quebec, and Sudbury and Thunder Bay, Ontario, have developed around the rich resource base in fisheries, hydropower, mining and forestry.

## WATERWAYS

In the 18th century, parties of voyageurs and fur traders leaving Montreal paddled and portaged to the heart of the continent. They often travelled



Work by Charles Comfort. Hart House Permanent Collection, University of Toronto

*Prairie Road, 1925*



the routes developed by First Nations people in the birchbark canoes they had created. Explorers could push on by water to the mountains of the far West. West of the Rocky Mountains, rivers like the Fraser and the Columbia provided access to the Pacific Ocean. Rivers were the route the fur traders took into the Northwest Territories to set up trading posts.

Winding through or around formidable obstacles like dense forest, high mountain ranges and the impenetrable Shield, the waterways have been Canada's lifeline. Water gave Canadians east–west avenues across the country above the U.S. border and linked southern and northern Canada. “Without the rivers,” Canadian novelist Hugh MacLennan observed, “the early nation could never have survived.”

The supply of water in Canada seems inexhaustible. Some 15% of all the coastline in the world is Canadian. Our extensive seawater wetlands include the coastal areas of Hudson Bay and James Bay, the marshes at Kamouraska in Quebec and Tintamarre in New Brunswick, and the Fraser River estuary in British Columbia.

Among Canada's many freshwater wetlands are the marshes in the Great Lakes Basin and along the shores of the St. Lawrence River, the Peace-Athabasca delta in northern Alberta, the Saskatchewan River and Red River deltas in Manitoba, the peatlands of Newfoundland and the Fraser River delta, and large areas of muskeg in northern Canada.

In the Prairie “pothole” region—some 750,000 square kilometres stretching across southern Alberta, Saskatchewan and Manitoba—millions of depressions fill with water from melting snow and rain in the spring. Some form lakes while others dry up in a few weeks. They provide homes, breeding or nesting areas for innumerable fish, birds and other animals.

Much of our abundant water is unavailable for human use: 90% of Canadians live near the southern border, while 60% of the freshwater flows north to empty into the Arctic Ocean. But the water within human reach has been heavily stressed. Many wetlands have been lost and others are in danger. In southern Ontario, more than 70% of the wetlands have vanished;

they have been drained or filled in for people's needs, such as roads, farmlands, industry and housing. Nearly three-quarters of the Prairie wetland margins have been degraded by agricultural practices.

## ATLANTIC MARITIME

In their legend of the creation of the universe, the Mi'Kmaq people of Prince Edward Island tell how The Great Spirit created the world and the people, and then found he had some dark red clay left over. Carefully fashioning the clay into a crescent form, he created an island: Prince Edward Island, as we now know it. Originally, though, the Mi'Kmaq named it Abegweit, which means “land cradled on the waves.”

The name is an apt one for the Atlantic Maritime ecozone. No one in Nova Scotia lives more than 50 kilometres from the sea. This is a land of islands, peninsulas, isthmuses and fertile valleys. It includes the provinces of New Brunswick, Nova Scotia and Prince Edward Island, the Îles-de-la-Madeleine and the area of Quebec from the Gaspé Peninsula southwest to the U.S. border below Sherbrooke. It has only 2% of Canada's total land and freshwater area but 11,200 kilometres of coastline. One could travel from Halifax to Vancouver and back again and still not cover such a distance.

The climate is moderate, cool and moist. During late spring and early summer, the chill of the Labrador Current mixes with the warmth of the Gulf Stream to produce banks of sea fog over coastal areas. Storms are more frequent here than anywhere else in Canada.

No single resource has influenced economic development in the Atlantic more than fish. Since word of their existence spread to Europe 500 years ago, Canada's rich fisheries have been heavily exploited. Even prior to the advance of European explorers like John Cabot, they were also a resource both for the Aboriginal peoples and the Norsemen. In recent times, the cod and other groundfish stocks have seriously declined. This has put severe economic pressure on the region, particularly the many

## *The Tempests*

*In the early days of 1998, an exceptional ice storm in Eastern Canada directly affected the lives of more people than any other weather event in Canadian history.*

*The unusually prolonged mix of freezing rain and drizzle settled a large mantle of ice over eastern Ontario, southwestern Quebec and parts of New Brunswick and Nova Scotia. The ice snapped trees and hydro poles and crashed power systems, leaving more than 4 million people in the dark, some for several weeks.*

*At the height of the crisis, 16,000 troops were called in to help clean up. It was a quiet storm, but for the crashing sound of tree branches and the crackle of ice underfoot.*

*On most days, the weather isn't worth a second look, but Canada is no stranger to adverse weather conditions, and there is a kind of humour and forbearance in the national psyche towards our extremes of snow and heat.*



Manitoba flood, 1997 (further details, see Appendix C)

*"There are two seasons in Winnipeg," goes the quip, "winter and June 15th." But in the 19th century, poet Andrew J. Ramsay wrote, "There is a rapture in tempestuous*

*weather," and another Canadian writer, Wilson MacDonald, surmised, "Were I not cold how should I come to know one potent pleasure of the sun's sweet rays?"*

*Today, Ramsay's point may be met with some resistance as Canadians look back on the latter half of this decade.*

*In the summer of 1996, a flood swept through the Saguenay River Valley in Quebec and forced 12,000 people from their homes. Over a period of 36 to 48 hours, climatologists recorded as much as 280 millimetres of rain. Insurers tagged the catastrophe Canada's first billion-dollar natural disaster.*

*In Winnipeg, in the winter of 1996, mail carriers were excused from duty when the*



wind chill temperature dropped to  $-65^{\circ}\text{C}$ . In 1997, the Red River in Manitoba flooded its banks to extend some 1,800 square kilometres. Normally 180 metres wide, the river spread to an astonishing girth of 30 kilometres. More than 28,000 people were forced from their homes.

The first hurricane to make landfall in Canada in 21 years swept by Halifax in the late summer of 1996, with wind speeds of 161 kilometres per hour. On the West Coast, Victoria and Vancouver set record levels of precipitation for the year ending August 1997.

In 1996–97, the federal government

offered \$144 million in disaster relief to the provinces, about 80% of which went to Quebec.

Some climatologists have claimed that more frequent weather hazards, such as droughts, floods, wildfires and severe storms, may be the result of global warming.

In the last century, Canada has warmed about  $1^{\circ}\text{C}$ —twice the global rate of change—although the rise in temperature is not consistent throughout the country. For example, the Mackenzie Basin in Canada's northern territories has warmed nearly  $2^{\circ}\text{C}$ , while the Atlantic Coast has remained unchanged.

Since the mid-1970s, there has been a noticeable trend to warmer and wetter weather. Since 1978, there has been less ice in the Arctic Sea and since 1970, less snow cover in the Northern Hemisphere. Spring ice break-up on Canadian lakes comes a week earlier than three decades ago.

In a radio address to all Canadians in early 1998, during the so-called “great ice storm,” Prime Minister Jean Chrétien noted that “the darkness was being lighted by thousands of individual acts of kindness.” Extreme weather seems to have at least one positive side—the power to bring people together.

coastal communities where fishing has been the primary industry and a way of life.

Forests, mainly of mixed woods, cover 90% of Atlantic Maritime land, but only a few pockets of true old-growth forest remain, since most areas have been harvested several times. Some 9% of the region is farmland, with major crops including forage for livestock, grains, potatoes and other vegetables. Halifax, Nova Scotia is the largest city, followed by Saint John and Moncton, New Brunswick.

## MIXEDWOOD PLAINS

More than one of every two Canadians lives along the lower Great Lakes–St. Lawrence River valley in the Mixedwood Plains ecozone. The most populated ecozone in Canada, it is also the smallest. It stretches from southern Ontario along the shoreline of the St. Lawrence River to Québec.

Almost 85% of this ecozone's residents live in urban centres along the Québec–Windsor corridor. This corridor contains 12 of Canada's 25 most populous centres, including the largest cities, Toronto and Montréal.

The region supports the commercial and industrial heartland of Canada. Its extensive waterways lead into the middle of the continent. Its rich, fertile soils, relatively mild climate (at least in terms of Canadian weather), abundant rainfall and access to the markets of the eastern United States have given it all the right conditions for commercial growth.

But human settlement has come at a price. At one time, more species of trees grew here than in any other part of Canada: even the cucumber tree and the sassafras. Today, less than 10% of the original forest remains. In its place are farms, orchards, cities and highways.

Canada's most productive agricultural soils are in the Mixedwood Plains. With 9% of Canada's land, the region yields 37% of its agricultural production. The Niagara Peninsula, famous for its orchards and vineyards, is the warmest and most intensively cultivated area.

## Downtown Canada

While most of Canada is sparsely settled, Canadians are increasingly concentrated in urban places. Between 1971 and 1996, the urban population grew 37% to 22.5 million people. Some 78% of Canadians live in and around cities. We are concentrated in four of our smallest ecozones: the Mixedwood Plains, the Atlantic Maritime, the Prairies and the Pacific Maritime.

The western and eastern ecozones



Source: Natural Resources Canada.



Urban growth has meant the loss of prime agricultural land. Since 1901, the area cultivated for agriculture in Canada has increased fivefold. More than half of the land converted to urban use between 1971 and 1996 was high-quality land, the kind most valuable for agriculture.



*Detail of a photo by David Truttle*

Engineer Creek, Dempster Highway, Yukon.

## CORDILLERAS AND COASTLINE

The mountainous and coastal west of Canada takes in four terrestrial ecozones. In the north, the Taiga Cordillera covers most of the northern part of the Yukon Territory and the southwest corner of the Northwest Territories. In the middle reaches, the Boreal Cordillera includes the southern part of the Yukon Territory, which has most of the Territory's people, and the northern half of British Columbia.

The Montane Cordillera, from north-central British Columbia southeast to southwest Alberta, is the most diverse ecozone in Canada, with some of the coldest and hottest conditions anywhere in the country. Canada's wettest climate occurs in the Pacific Maritime zone on the mainland coast and offshore islands of British Columbia.

British Columbia has set many of Canada's weather records: for the most precipitation and the greatest snowfalls in a day, a month and a year, for example. For sheer cold, though, the record goes to Snag, Yukon Territory, where the temperature plummeted to  $-63^{\circ}\text{C}$  one day in 1947.

### Taiga Cordillera

The Taiga Cordillera is so wild and unspoiled that it hosts Canada's largest concentration of wolverines, the solitary nomads of the wild. It has some of Canada's largest waterfalls and deepest canyons, along with about 300 people, most of whom live in Old Crow, the Yukon Territory's most northerly community. The land ranges from treeless tundra in the north to alpine vegetation and lowland forests farther south. It is marked by rugged mountain peaks and great wetlands and spruce-lined valleys.

On a single mountain, one may see completely different landscapes: the western slope will be lushly covered in plants while the eastern is dry and arid. This is because the clouds deposit most of their moisture on the western slopes before continuing eastward. The highest waterfall in the country, Della Falls at Della Lake, British Columbia, descends 440 metres to earth. By contrast, Canada's most impressive waterfall, the Horseshoe Falls on the Canadian side of Niagara Falls, is only 57 metres high, while Toronto's CN Tower, the world's tallest free-standing structure, is 550 metres in height.

### The Boreal and Montane Cordilleras

In the mountainous Boreal Cordillera, the St. Elias Mountains in the southwest corner of the Yukon Territory include Mount Logan, the highest point in Canada at just less than 6,000 metres, and 12 other peaks more than 4,600 metres tall. The St. Elias Icefields are the largest non-polar icefields in the world and feed five of the world's longest glaciers outside the polar regions. This ecozone has many important mineral deposits, especially copper, gold and silver. The largest centre is Whitehorse, Yukon Territory.

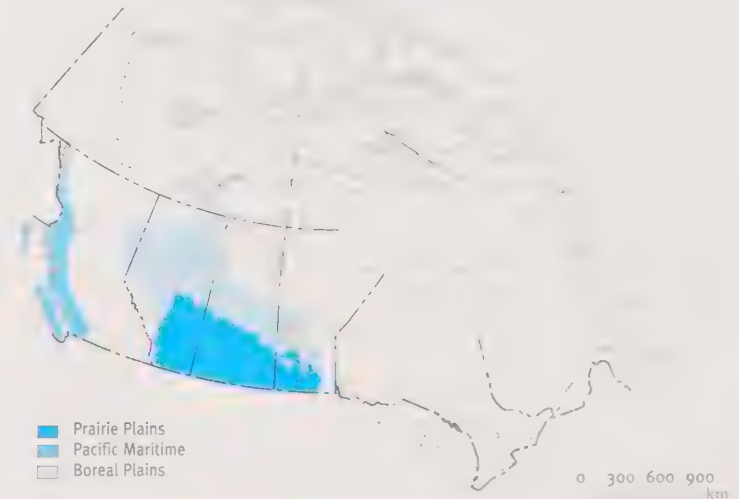
The Montane Cordillera is Canada's most varied ecozone with a covering of alpine tundra, dense evergreen forests and dry sagebrush. This rugged area has several large interior plains, including two major agricultural areas: Creston Valley and the Okanagan Valley. Most of the original grasslands in the Okanagan have been replaced by crops, especially orchards and vineyards. The headwaters of the Fraser and Columbia rivers lie in the Montane region.

Coal mines in Alberta and British Columbia are important in this area, and forestry is the major industry on the lower- and middle-mountain slopes. Pulp and paper mills are located throughout the ecozone. The largest cities are Kelowna and Kamloops, British Columbia.

### Pacific Maritime and Marine

Canada is the largest exporter of forest products in the world, and British Columbia produces about 45% of the Canadian total. The forest productivity of the Pacific Maritime region is the highest in the country. For well over a century, logging and related forest industries have been the economic mainstay of many communities in this region. Nurtured by abundant moisture and a long frost-free period, the coastal temperate rain

The plains and Pacific ecozones



Source: Natural Resources Canada.



## Call of the Loon

*The defining moment of a Canadian vacation at the lake may be the moment we hear the tremolo or wail of the common loon.*

*Now celebrated on Canada's one dollar coin, the loon has four distinct tunes in its musical range. They are the tremolo, the hoot, the wail and the yodel.*

*The tremolo, which sounds like a crazy laugh, can signal alarm or annoyance. The one-note hoot resembles "hoo" and is sometimes used by family members to locate one another.*

*The wail, the loveliest of the loon's musical notes, is a way of regaining contact with a lost mate or answering another loon's tremolo. Only the males yodel, which is actually a long, rising call with repeated notes that can last up to six seconds. Each male loon has a unique yodel that identifies just him.*

forest covers more than 10 million hectares. Over the past 120 years, more than 2 million hectares of the rain forest have been clear-cut. Still, the tallest trees in Canada grow along the west coast of British Columbia. Many of the largest are several centuries old, and some have trunks that measure more than 2 metres in diameter.

Almost three-quarters of British Columbians live in the Georgia Basin of this ecozone, which includes Victoria and the large urban centres of the Lower Mainland. Vancouver, Canada's third largest city, is here. In the Pacific Maritime, average temperatures range between 12 and 18°C in July, and to the envy of Canadians from colder climates, the weather is mild even in January, with averages between 4 and 6°C.

People have inhabited coastal British Columbia and the Queen Charlotte Islands, along the Pacific Marine ecozone, for at least 8,000 years. The Haida people of this region were exceptional sea-voyagers. Sea ice is largely absent and the waters abound in animal and bird life. Some 3,800 species of plankton—3.5% of the world's total—furnish rich food sources for fish.

## THE CENTRAL PLAINS

On the flat, low-lying plains of the Prairies, horizons extend as far as the eye can see. Some 97% of Prairie land is classed as agricultural. To the north are the Boreal Plains, 84% wreathed in forests. Together, these two regions make up the Central Plains of Canada. They encompass much of the Prairie provinces (Alberta, Saskatchewan and Manitoba) and edge into the Northwest Territories and the Peace River region of British Columbia.

## The Boreal Plains

Arching from Peace River country to the southeast corner of Manitoba, the Boreal Plains retain the long, cold winters of the North, but the nearly three-quarters of a million people who live here also enjoy moderately warm, if short, summers and a reasonable growing season.

A green scarf of timber covers 84% of the region, and forestry is the major industry. Farming has made considerable inroads in the southerly and northwesterly fringes, especially the Peace River area, but less than 20% of the total land is devoted to agriculture. Besides forestry, mining, oil and gas exploration and production, hunting and trapping are important activities. Among the larger communities are Wood Buffalo and Grande Prairie, Alberta.

## The Prairies

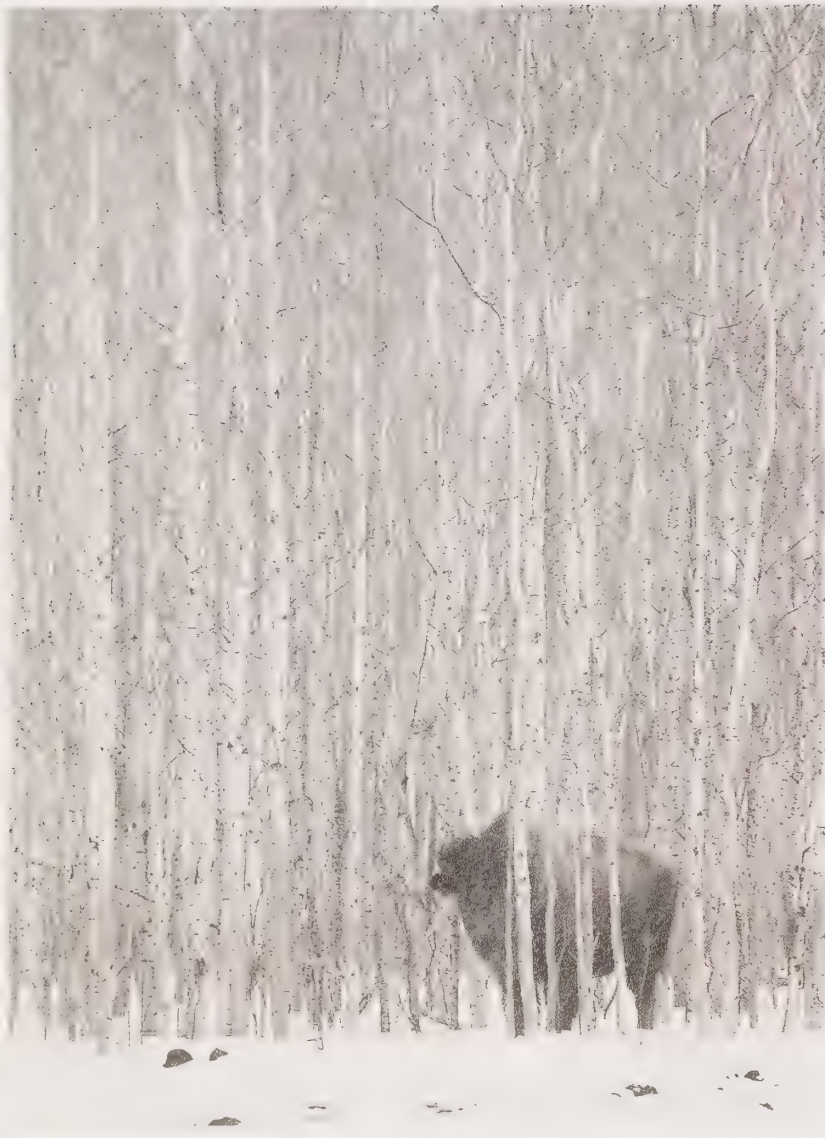
From a base at the U.S. border, the Canadian Prairies sweep from the Rocky Mountains in Alberta to the Red River Valley in Manitoba, across the southern third of the Prairie provinces. With flat or gently rolling terrain and productive soil, the Prairies hold more than 60% of Canada's cropland and 80% of its rangeland and pasture. Saskatchewan alone has about one-third of all the farmland in Canada, with more than 250,000 square kilometres. Canola and wheat are major crops. But the economy of the region has diversified, and mining is the second most important industry. Alberta accounts for about half of Canada's mineral production, most of it from petroleum and natural gas.

*The loons' breeding range takes in almost all of Canada. As soon as the ice thaws, the loons arrive in pairs from winter ranges in the Gulf of Mexico and on the east and west coasts of North America. They build their nests close to water, often on islands or half-submerged logs. They use whatever is available: leaves, moss, grass, tree needles or mud.*

*Impressive creatures in the summer, loons have black-and-white checkered backs, glossy black heads, and sport a white necklace at the throat. They are solitary nesters and need much space.*

*A small lake between five and 50 hectares is likely to have room for only one pair. Loons usually lay two eggs in June. By the time the chicks are 12 weeks old, they can fly and provide most of their own food. By migration time, the youngsters can look after themselves, and the adults fly away first, with the young following soon after.*





A wood bison out for a stroll.

The longest continuous belt of settlement in Canada winds through Manitoba, Saskatchewan and Alberta. More than 80% of the people live in urban areas, and there are five major cities: Calgary, Edmonton, Winnipeg, Saskatoon and Regina. More than any other part of Canada, the Prairies have been altered by human activity. Perhaps less than 1% of the original tall-grass Prairie remains, supplanted by crops. Habitats for many wildlife species have been reduced. Yet, even today, more than half of all North American ducks are born in the wetlands of this region.

Nature can take dramatic turns on the Prairies. Because the neighbouring Rocky Mountains block the moist air from the Pacific, the climate is usually dry, with short, warm summers and long, cold winters. But in the depths of freezing weather, Prairie-dwellers can suddenly experience a chinook: a warm, dry wind bringing summer-like heat. The most extreme temperature change ever measured in Canada took place during a chinook in Pincher Creek, Alberta, in January 1992, when the thermometer shot from  $-19^{\circ}\text{C}$  to  $22^{\circ}\text{C}$  in just one hour.

Writing about growing up in the Cypress Hills country of Saskatchewan early in this century, Wallace Stegner caught the dramatic intensity of the Canadian heartland:

"Desolate? Forbidding?" he asked. "There was never a country that in its good moments was more beautiful. Even in drouth or dust storm or blizzard it is the reverse of monotonous... You don't get out of the wind, but learn to lean and squint against it. You don't escape sky and sun, but wear them in your eyeballs and on your back... At noon the total sun pours on your single head; at sunrise or sunset you throw a shadow a hundred yards long... This is a land to mark the sparrow's fall."

## SOURCES

Environment Canada  
Natural Resources Canada  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Human Activity and the Environment.** Occasional. 11-509E
- **Environmental Perspectives: Studies and Statistics.** Occasional. 11-528-XPE
- **Canadian Forestry Statistics.** Annual. 25-202-XPP
- **General Review of the Mineral Industries, Mines, Quarries and Oil Wells.** Annual. 26-201-XPB
- **Agricultural Profile of Canada 1996.** Census. 93-356-XPB
- **Historical Overview of Canadian Agriculture 1997.** 93-358-XPB
- **Canadian Agriculture at a Glance 1994.** Census. 96-301

Selected publications from other sources

- **Historical Atlas of Canada.** University of Toronto Press. *Vol 1 From the Beginning to 1800*, 1987; *Vol 2 The Land Transformed, 1800—1891*, 1993; *Vol 3 Addressing the Twentieth Century*, 1990.
- **The National Atlas of Canada.** Natural Resources Canada. 1993.
- **A Perspective on Canada's Ecosystems.** Canadian Council on Ecological Areas. 1996.
- **The State of Canada's Environment.** Environment Canada. 1991.



## The Land

### Legend

nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 1.1 Land and Freshwater Area

	Total area	Land	Freshwater	% of total area
		km <sup>2</sup>		
<b>Canada</b>	<b>9,970,610</b>	<b>9,215,430</b>	<b>755,180</b>	<b>100.0</b>
Newfoundland	405,720	371,690	34,030	4.1
Prince Edward Island	5,660	5,660	—	0.1
Nova Scotia	55,490	52,840	2,650	0.6
New Brunswick	73,440	72,090	1,350	0.7
Quebec	1,540,680	1,356,790	183,890	15.5
Ontario	1,068,580	891,190	177,390	10.7
Manitoba	649,950	548,360	101,590	6.5
Saskatchewan	652,330	570,700	81,630	6.5
Alberta	661,190	644,390	16,800	6.6
British Columbia	947,800	929,730	18,070	9.5
Yukon Territory	483,450	478,970	4,480	4.8
Northwest Territories	3,426,320	3,293,020	133,300	34.4

Source: Natural Resources Canada, Canada Centre for Remote Sensing, GeoAccess.

## 1.2 Weather Conditions in Capital and Major Cities

	Average temperature						Annual				
	Coldest month			Warmest month			Average temperature		Snowfall	Total precipitation	Wet days
	Month	High	Low	Month	High	Low	High	Low			
		degrees Celsius					degrees Celsius		cm	mm	number
St. John's	February	-1.4	-8.7	July	20.2	10.5	8.6	0.8	322.1	1,482	217
Charlottetown	January	-3.4	-12.2	July	23.1	13.6	9.5	0.8	338.7	1,201	177
Halifax	February	-1.5	-10.6	July	23.4	13.2	10.7	1.4	261.4	1,474	170
Fredericton	January	-4.0	-15.4	July	25.6	12.9	11.0	-0.6	294.5	1,131	156
Québec	January	-7.7	-17.3	July	24.9	13.2	9.0	-1.0	337.0	1,208	177
Montréal	January	-5.8	-14.9	July	26.2	15.4	10.9	1.2	214.2	940	162
Ottawa	January	-6.3	-15.5	July	26.4	15.1	10.7	0.8	221.5	911	159
Toronto	January	-1.3	-7.9	July	26.5	17.6	12.6	5.2	135.0	819	133
Winnipeg	January	-13.2	-23.6	July	26.1	13.4	8.1	-3.4	114.8	504	119
Regina	January	-11.0	-22.1	July	26.3	11.9	8.9	-3.8	107.4	364	109
Edmonton	January	-8.2	-17.0	July	23.0	12.0	8.7	-1.5	129.6	461	123
Calgary	January	-3.6	-15.7	July	23.2	9.5	10.3	-2.6	135.4	399	111
Vancouver	January	5.7	0.1	August	21.7	12.9	13.5	6.1	54.9	1,167	164
Victoria	January	6.5	0.3	July	21.8	10.7	13.9	5.1	46.9	858	153
Whitehorse	January	-14.4	-23.2	July	20.3	7.6	4.1	-6.2	145.2	269	122
Yellowknife	January	-23.9	-32.2	July	20.8	12.0	-0.8	-9.7	143.9	267	118
International comparisons											
Beijing, China	January	1.0	-8.0	July	30.0	22.0	17.0	7.0	30.0	623	66
Cairo, Egypt	January	18.0	9.0	July	34.0	22.0	27.0	16.0	--	22	5
Capetown, South Africa	July	17.0	8.0	February	25.0	17.0	21.0	13.0	--	652	95
London, England	January and February	7.0	2.0	July	22.0	13.0	14.0	7.0	--	594	107
Los Angeles, U.S.A.	January	18.0	8.0	August	24.0	18.0	21.0	13.0	--	373	39
Mexico City, Mexico	January	21.0	7.0	May	26.0	13.0	23.0	11.0	--	726	133
Moscow, Russia	January	-7.0	-13.0	July	22.0	13.0	8.0	1.0	161.0	575	181
New Delhi, India	January	20.0	9.0	May	38.0	26.0	31.0	20.0	--	715	47
Paris, France	January	6.0	1.0	July	24.0	15.0	14.0	7.0	--	585	164
Rio de Janeiro, Brazil	June	27.0	18.0	February	33.0	24.0	30.0	20.0	--	1,093	131
Rome, Italy	January	13.0	4.0	July and August	28.0	19.0	20.0	11.0	--	749	76
Sydney, Australia	July	16.0	8.0	January and February	26.0	19.0	22.0	14.0	--	1,205	152
Tokyo, Japan	January	9.0	2.0	August	30.0	24.0	19.0	12.0	20.0	1,563	104
Washington, D.C.	January	6.0	-3.0	July	31.0	21.0	19.0	9.0	42.0	991	112

Sources: Environment Canada, *Climate Normals 1961–1990* (Canada), and *Climate Normals 1951–1980* (International).



## 1.3 Principal Heights

	Elevation m		Elevation m		Elevation m		Elevation m
<b>Newfoundland</b>		Mont Tremblant	968	Mount Brazeau	3,525	Monashee Mountains Torii Mountain	3,429
Torngat Mountains		Mont Sainte-Anne	800	Snow Dome (on Alta.–B.C. boundary)	3,520		
Mount Caubvick <sup>1</sup> (highest point in Nfld.)		Mont Sir-Wilfrid	783	Mount Lyell (on Alta.–B.C. boundary)	3,504	<b>Yukon Territory</b>	
(on Nfld.–Que. boundary)	1,652	Monts Otish		Hungabee Mountain		St. Elias Mountains	
Cirque Mountain	1,568	Unnamed peak (52°19' 71°27')	1,135	(on Alta.–B.C. boundary)	3,492	Mount Logan (highest point in Canada)	5,959
Mount Cladonia	1,453	Collines Montérégiennes		Mount Athabasca	3,491	Mount St. Elias	
Mount Eliot	1,356	Mont Brome	533	Mount King Edward		(on Yukon–Alaska boundary)	5,489
Mount Tetragona	1,356			(on Alta.–B.C. boundary)	3,490	Mount Lucania	5,226
Quartzite Mountain	1,186	<b>Ontario</b>		Mount Kitchener	3,490	King Peak	5,173
Blow Me Down Mountain	1,183	Ishpatina Ridge				Mount Steele	5,067
Mealy Mountains		(highest point in Ont.)	693	<b>British Columbia</b>		Mount Wood	4,838
Unnamed peak (53°37' 58°33')	1,176	Ogidaki Mountain	665	St. Elias Mountains		Mount Vancouver (on Yukon–Alaska boundary)	4,785
Kaumajet Mountains		Batchawana Mountain	653	Fairweather Mountain (highest point on B.C.–Alaska boundary)	4,663	Mount Macaulay	4,663
Bishops Mitre	1,113	Tip Top Mountain	640	Mount Quincy Adams		Mount Slaggard	4,663
Long Range Mountains		Niagara Escarpment		(on B.C.–Alaska boundary)	4,133	Mount Hubbard	
Lewis Hills	814	Blue Mountains	541	Mount Root		(on Yukon–Alaska boundary)	4,577
Gros Morne	806	Osler Bluff	526	(on B.C.–Alaska boundary)	3,901		
		Caledon Mountain	427	Coast Mountains		<b>Northwest Territories</b>	
<b>Prince Edward Island</b>				Mount Waddington	4,016	Mackenzie Mountains	
Highest point		<b>Manitoba</b>		Mount Tiedemann	3,848	Unnamed peak (61°52' 127°42')	
Queen's County (46°20' 63°25')	142	Baldy Mountain		Combatant Mountain	3,756	(highest point in N.W.T.)	2,773
		(highest point in Man.)	832	Asperity	3,716	Mount Sir James MacBrien	2,762
<b>Nova Scotia</b>		Highest point in Porcupine Hills	823	Serra Peaks	3,642	Ellesmere Island	
Highest point		Riding Mountain	610	Monarch Mountain	3,459	Barbeau Peak	2,616
Cape Breton Highlands				Rocky Mountains		Axel Heiberg Island	
(46°42' 60°36')	532	<b>Saskatchewan</b>		Mount Robson	3,954	Outlook Peak	2,210
		Cypress Hills		Mount Columbia		Baffin Island	
<b>New Brunswick</b>		(highest point in Sask.)	1,468	(on Alta.–B.C. boundary)	3,747	Mount Odin	2,147
Mount Carleton (highest point in N.B.)	817	Wood Mountain	1,013	Mount Clemenceau	3,642	Devon Island	
Wilkinson Mountain	785	Vermilion Hills	785	Mount Assiniboine		Summit Devon Ice Cap	1,920
				(on Alta.–B.C. boundary)	3,618	Franklin Mountains	
<b>Quebec</b>		<b>Alberta</b>		Mount Goodsir: North Tower	3,581	Cap Mountain	1,577
Monts Torngat		Rocky Mountains		Mount Goodsir: South Tower	3,520	Mount Clark	1,462
Mont D'Iberville <sup>1</sup> (highest point in Que.)		Mount Columbia (highest point on Alta.–B.C. boundary)	3,747	Snow Dome (on Alta.–B.C. boundary)	3,520	Pointed Mountain	1,405
(on Nfld.–Que. boundary)	1,652	North Twin	3,733	Mount Bryce	3,507	Nahanni Butte	1,396
Les Appalaches		Mount Alberta	3,620	Selkirk Mountains		Melville Island	
Mont Jacques-Cartier	1,268	Mount Assiniboine		Mount Sir Sandford	3,522	Unnamed peak (75°25' 114°47')	776
Mont Gosford	1,192	(on Alta.–B.C. boundary)	3,618	Cariboo Mountains		Banks Island	
Mont Richardson	1,185	Mount Forbes	3,612	Mount Sir Wilfrid Laurier	3,520	Durham Heights	732
Mont Mégantic	1,105	South Twin	3,581	Purcell Mountains		Victoria Island	
Les Laurentides		Mount Temple	3,547	Mount Farnham	3,481	Unnamed peak	655
Unnamed peak (47°19' 70°50')	1,166						

1. Mount Caubvick is also known as Mont D'Iberville in Quebec.

Source: Natural Resources Canada, Canada Centre for Remote Sensing, GeoAccess.

## 1.4 The Great Lakes

	Elevation	Length	Breadth	Maximum depth	Total area	Area on Canadian side of boundary
	m	km	km	m	km <sup>2</sup>	km
Superior	184	563	257	405	82,100	28,700
Michigan	176	494	190	281	57,800	—
Huron	177	332	295	229	59,600	36,000
Erie	174	388	92	64	25,700	12,800
Ontario	75	311	85	244	18,960	10,000

Source: Natural Resources Canada, Canada Centre for Remote Sensing, GeoAccess.

1.5 Principal Lakes<sup>1</sup>

	Elevation	Area in Canadian territory		Elevation	Area in Canadian territory
	m	km <sup>2</sup>		m	km <sup>2</sup>
<b>Newfoundland and Labrador</b>			Lake Simcoe	219	744
Smallwood Reservoir	471	6,527	Rainy Lake <sup>3</sup> (total area 932 km <sup>2</sup> )	338	741
Melville Lake	tidal	3,069	Big Trout Lake	213	661
			Lake St. Clair <sup>3</sup> (total area 1,210 km <sup>2</sup> )	175	490
<b>Nova Scotia</b>			<b>Manitoba</b>		
Bras d'Or Lake	tidal	1,099	Lake Winnipeg	217	24,387
<b>Quebec</b>			Lake Winnipegosis	254	5,374
Lac Mistassini	372	2,335	Lake Manitoba	248	4,624
Réservoir Manicouagan	360	1,942	Southern Indian Lake	254	2,247
Réservoir Gouin	404	1,570	Cedar Lake	253	1,353
Lac à l'Eau-Claire	241	1,383	Island Lake	227	1,223
Lac Bienville	426	1,249	Gods Lake	178	1,151
Lac Saint-Jean	98	1,003	Cross Lake	207	755
Réservoir Pipmuacan	396	978	Playgreen Lake	217	657
Lac Minto	168	761			
Réservoir Cabonga	361	677	<b>Saskatchewan</b>		
<b>Ontario</b>			Lake Athabasca <sup>2</sup>	213	7,935
Lake Nipigon	260	4,848	Reindeer Lake <sup>2</sup>	337	6,650
Lake of the Woods <sup>2,3</sup> (total area 4,472 km <sup>2</sup> )	323	3,150	Wollaston Lake	398	2,681
Lac Seul	357	1,657	Cree Lake	487	1,434
Lake Abitibi <sup>2</sup>	265	931	Lac La Rouge	364	1,413
Lake Nipissing	196	832	Peter Pond Lake	421	775
			Doré Lake	459	640

1.5 Principal Lakes<sup>1</sup> (concluded)

	Elevation	Area in		Elevation	Area in
	m	Canadian territory		m	Canadian territory
		km <sup>2</sup>			km <sup>2</sup>
<b>Alberta</b>			Yathkyed Lake	140	1,449
Lake Clair	213	1,436	Kasba Lake	336	1,341
Lesser Slave Lake	577	1,168	Aberdeen Lake	80	1,100
			Napaktulik Lake	381	1,080
<b>British Columbia</b>			MacKay Lake	431	1,061
Williston Lake	671	1,761	Garry Lake	148	976
Atlin Lake <sup>2</sup>	668	775	Contwoyto Lake	564	957
			Hottah Lake	180	918
<b>Yukon Territory</b>			Aylmer Lake	375	847
Kluane Lake	409	781	Nonacho Lake	354	784
			Clinton-Colden Lake	375	737
<b>Northwest Territories</b>			Selwyn Lake <sup>2</sup>	398	717
Great Bear Lake <sup>1</sup>	156	31,328	Point Lake	375	701
Great Slave Lake	156	28,568	Ennadai Lake	311	681
Nettilling Lake	30	5,542	Wholdaia Lake	364	678
Durowant Lake	236	3,833	Tulemalu Lake	279	668
Amndjuak Lake	113	3,115	Kamilukuak Lake	266	638
Mualtin Lake <sup>2</sup>	278	2,279	Lac de Gras	396	633
Baker Lake	2	1,887	Buffalo Lake	265	612
Lac la Martre	265	1,776	Kaminak Lake	53	600

1. Lakes with total area of 600 km<sup>2</sup> or greater, excluding the Great Lakes.

2. Spans provincial or territorial boundary. Listed under province or territory containing larger portion.

3. Spans the Canada-United States border.

4. Largest lake wholly in Canada.

Source: Natural Resources Canada, Canada Centre for Remote Sensing, GeoAccess.



## 1.6 Principal Rivers and Their Tributaries

Drainage basin and river	Drainage area	Length	Drainage basin and river	Drainage area	Length
	km <sup>2</sup>	km		km <sup>2</sup>	km
<b>Flowing into the Pacific Ocean</b>					
Yukon (mouth to head of Nisutlin)	..	3,185	Coppermine	..	845
(International boundary to head of Nisutlin)	323,800	1,149	Anderson	..	692
Porcupine	61,400	721	Horton	..	618
Stewart	51,000	644	<b>Flowing into Hudson Bay and Hudson Strait</b>		
Pelly	51,000	608	Nelson (to head of Bow)	892,300	2,575
Teslin	35,500	393	(to outlet of Lake Winnipeg)	802,900	644
White	38,000	265	Saskatchewan (to head of Bow)	334,100	1,939
Columbia (mouth to head of Columbia Lake)	..	2,000	South Saskatchewan (to head of Bow)	144,300	1,392
(International boundary to head of Columbia Lake)	102,800	801	Red Deer	45,100	724
Kootenay	37,700	780	Bow	26,200	587
Kettle (to head of Holmes Lake)	4,700	336	Oldman	26,700	362
Okanagan (to head of Okanagan Lake)	21,600	314	North Saskatchewan	12,800	1,287
Fraser	232,300	1,370	Battle (to head of Pigeon Lake)	30,300	570
Thompson (to head of North Thompson)	55,400	489	Red (to head of Sheyenne)	138,600	877
North Thompson	20,700	338	Assiniboine	160,600	1,070
South Thompson (to head of Shuswap)	17,800	332	Winnipeg (to head of Firesteel)	106,500	813
Nechako (to head of Eutsuk Lake)	47,100	462	English	52,300	615
Stuart (to head of Driftwood)	16,200	415	Fairford (to head of Manitoba Red Deer)	80,300	684
Skeena	54,400	579	Churchill (to head of Churchill Lake)	281,300	1,609
Stikine	49,800	539	Beaver (to outlet of Beaver Lake)	..	491
Nass	21,100	380	Severn (to head of Black Birch)	102,800	982
<b>Flowing into the Arctic Ocean</b>			Albany (to head of Cat)	135,200	982
Mackenzie (to head of Finlay)	1,805,200	4,241	Thelon	142,400	904
Peace (to head of Finlay)	302,500	1,923	Dubawnt	57,500	842
Smoky	51,300	492	La Grande-Rivière (Fort George River)	97,600	893
Athabasca	95,300	1,231	Koksoak (to head of Caniapiscaw)	133,400	874
Pembina	12,900	547	Nottaway (via Bell to head of Mégiscane)	65,800	776
Liard	277,100	1,115	Rupert (to head of Témiscamie)	43,400	763
South Nahanni	36,300	563	Eastmain	46,400	756
Fort Nelson (to head of Sikanni Chief)	55,900	517	Attawapiskat (to head of Bow Lake)	50,500	748
Petitot	..	404	Kazan (to head of Ennadai Lake)	71,500	732
Hay	48,200	702	Grande rivière de la Baleine	42,700	724
Peel (mouth of west Channel to head of Ogilvie)	73,600	684	George	41,700	565
Arctic Red	..	499	Moose (to head of Mattagami)	108,500	547
Slave (from Peace River to Great Slave Lake)	616,400	415	Abitibi (to head of Louis Lake)	29,500	547
Fond du Lac (to outlet of Wollaston Lake)	66,800	277	Mattagami (to head of Minisinkwa Lake)	37,000	443
Back (to outlet of Muskox Lake)	106,500	974	Missinaibi	23,500	426
			Harricana/Harricanaw	29,300	533

## 1.6 Principal Rivers and Their Tributaries (concluded)

Drainage basin and river	Drainage area	Length	Drainage basin and river	Drainage area	Length
	km <sup>2</sup>	km		km <sup>2</sup>	km
Hayes	108,000	483	Gatineau	23,700	386
aux Feuilles	42,500	480	du Lièvre	..	330
Winnisk	67,300	475	Saguenay (to head of Péribonca)	88,000	698
Broadback	20,800	450	Péribonca	28,200	451
à la Baleine	31,900	428	Mistassini	21,900	298
de Povungnituk	28,500	389	Chamouchouane	..	266
Innuksuac	11,400	385	Saint-Maurice	43,300	563
Petite rivière de la Baleine	15,900	380	Manicouagan (to head of Mouchalagane)	45,800	560
Arnaud	49,500	377	aux Outardes	19,000	499
Nastapoca	13,400	360	Romaine	14,350	496
Kogaluc	11,600	304	Betsiamites (to head of Manouanis)	18,700	444
<b>Flowing into the Atlantic Ocean</b>			Moisie	19,200	410
St. Lawrence River	839,200	3,058	St-Augustin	9,900	233
Nipigon (to head of Ombabika)	25,400	209	Richelieu (to mouth of Lake Champlain)	3,800	171
Spanish	14,000	338	Churchill (to head of Ashuanipi)	79,800	856
Trent (to head of Irondale)	12,400	402	Saint John	35,500	673
Sawa River	146,300	1,271	Little Mecatina	19,600	547
			Natashquan	16,100	410

Source: Natural Resources Canada, Canada Centre for Remote Sensing, GeoAccess.

## 1.7 Area of Major Sea Islands<sup>1</sup>

	Area		Area
	km <sup>2</sup>		km <sup>2</sup>
Baffin Island	507,451	<b>Northwest Territories south of the Arctic Circle<sup>3</sup></b>	
<b>Queen Elizabeth Islands</b>		Southampton <sup>4</sup>	41,214
Ellesmere	196,236	Coats <sup>4</sup>	5,498
Devon	55,247	Mansel <sup>4</sup>	3,180
Axel Heiberg	43,178	Akimiski <sup>4</sup>	3,001
Melville	42,149	Flaherty <sup>4</sup>	1,585
Bathurst	16,042	Nottingham <sup>5</sup>	1,372
Prince Patrick	15,848	Resolution <sup>5</sup>	1,015
Ellef Ringnes	11,295	<b>Pacific Coast</b>	
Cornwallis	6,995	Vancouver	31,285
Amund Ringnes	5,255	Graham	6,361
Mackenzie King	5,048	Moresby	2,608
Borden	2,794	Princess Royal	2,251
Cornwall	2,258	Pitt	1,375
Eglinton	1,541	<b>Atlantic Coast and Gulf of St. Lawrence</b>	
Graham	1,378	Newfoundland (main island)	108,860
Lougheed	1,308	<b>Gulf of St. Lawrence</b>	
Byam Martin	1,150	Cape Breton	10,311
Île Vanier	1,126	Anticosti	7,941
Cameron	1,059	Prince Edward	5,620
<b>Arctic Islands south of Queen Elizabeth Islands (but north of the Arctic Circle<sup>2</sup>)</b>		<b>Bay of Fundy</b>	
Victoria	217,291	Grand Manan	137
Banks	70,028		
Prince of Wales	33,339		
Somerset	24,786		
King William	13,111		
Bylot	11,067		
Prince Charles	9,521		
Stefansson	4,463		
Richards	2,165		
Air Force	1,720		
Wales	1,137		
Rowley	1,090		

1. A major island has a land area greater than 130 km<sup>2</sup>.

2. There are no islands over 130 km<sup>2</sup> in the Yukon.

3. These islands are part of Nunavut Territory as of April 1999.

4. Keewatin District.

5. Franklin District.

**Source:** GeoAccess, Canada Centre for Remote Sensing, Natural Resources Canada.



## 1.8 Weather Records for Canada, United States and the World

	Canada	United States	World
Highest maximum air temperature	45.0°C Midale and Yellowgrass, Sask. (July 5, 1937)	56.7°C Death Valley, California (July 10, 1913)	58.0°C Al'azizyah, Libya (September 13, 1922)
Lowest minimum air temperature	-63.0°C Snag, Y.T. (February 3, 1947)	-62.1°C Prospect Creek Camp, Alaska (January 23, 1971)	-89.6°C Vostok, Antarctica (July 21, 1983)
Coldest month	-47.9°C Eureka, N.W.T. (February, 1979)	..	..
Highest sea-level pressure	107.96 kPa Dawson, Y.T. (February 2, 1989)	107.86 kPa Northway, Alaska (January 31, 1989)	108.38 kPa Agata, Siberia, Russia (December 31, 1968)
Lowest sea-level pressure	94.02 kPa St. Anthony, Nfld. (January 20, 1977)	89.23 kPa Matecumbe Key, Florida (September 2, 1935)	87.00 kPa In eye of Typhoon Tip in the Pacific Ocean, 17°N, 138°E (October 12, 1979)
Greatest precipitation in a 24-hour period	489.2 mm Ucluelet Brynnor Mines, B.C. (October 6, 1967)	1,090 mm Alvin, Texas (July 28, 1979)	1,869.9 mm Cilaos, La Réunion Island (March 15, 1952)
Greatest precipitation in one month	2,235.5 mm Swanson Bay, B.C. (November, 1917)	2,717.8 mm Kukui, Hawaii (March, 1942)	9,300 mm Cherrapunji, India (July, 1861)
Greatest precipitation in one year	9,479 mm Henderson Lake, B.C. (1997)	17,902.7 mm Kukui, Hawaii (1982)	26,461.2 mm Cherrapunji, India (August 1860 to July 1861)
Greatest average annual precipitation	6,655 mm Henderson Lake, B.C.	11,684 mm Mt. Waialeale, Kauai, Hawaii	11,684 mm Mt. Waialeale, Kauai, Hawaii
Least annual precipitation	12.7 mm Arctic Bay, N.W.T. (1949)	0.0 mm Bagdad, California (October 3, 1912 to November 8, 1914)	0.0 mm Arica, Chile (no rain for 14 years)
Greatest average annual snowfall	1,433 cm Glacier Mt. Fidelity, B.C.	1,460.8 cm Rainer Paradise Ranger Station, Washington	..
Greatest snowfall in one season	2,446.5 cm Revelstokes/Mt. Copeland, B.C. (1971-72)	2,850 cm Rainer Paradise Ranger Station, Washington (1971-72)	..
Greatest snowfall in one month	535.9 cm Haines Apps. No. 2, B.C. (December 1959)	990.6 cm Tamarack, California (January 1911)	..

## 1.8 Weather Records for Canada, United States and the World (concluded)

	Canada	United States	World
Greatest snowfall in one day	<b>118.1 cm</b> <b>Lakelse Lake, B.C.</b> <b>(January 17, 1974)</b>	193.0 cm Silver Lake, Colorado (April 14–15, 1921)	
Highest average annual number of thunderstorm days	<b>34 days</b> <b>London, Ont.</b>	96 days Fort Meyers, Florida	322 days Bogor, Indonesia
Heaviest hailstone	<b>290g</b> <b>Cedoux, Sask.</b> <b>(August 27, 1973)</b>	758 g Coffeyville, Kansas (September 3, 1970)	15,000 g Guangdong province of China (April 19, 1995)
Highest average annual wind speed	<b>36 km/h</b> <b>Cape Warwick, Resolution Island, N.W.T.</b>	56.3 km/h Mt. Washington, New Hampshire	
Highest hourly wind speed	<b>201.1 km/h</b> <b>Cape Hopes Advance (Quaqtaq), Que.</b> <b>(November 18, 1931)</b>	362.0 km/h Mt. Washington, New Hampshire (April 12, 1934)	
Highest average hours of fog	<b>1,890 hours</b> <b>Argentina, Nfld.</b>	2,552 hours Cape Disappointment, Washington	

**Source:** Environment Canada, Canadian Meteorological Centre.





## *The Legacy of Settlement*

### **C h a p t e r**

*The story goes that a legendary Cree medicine man lost his headdress in battle near the present-day city of Medicine Hat. Another tells of traders who bartered whisky for fur and whose customers caroused so fiercely in a place near Lethbridge that they named the town Fort Whoop-Up. St. John's likely received its name when John Cabot's ships sailed into harbour on the saint's feast day, and Victoria may have been so*

**T w o**

named by colonists pining for a far-away queen. Hudson Bay, the Fraser River and countless other landmarks bear the names of the people who happened upon them. Even those entrepreneurs who financed the explorers have their lasting memorials: the Boothia Peninsula, the northernmost tip of the North American mainland, is a take on the maker of Booth's Gin.

The names of Canada's settlements are like signposts to our history and the varied experiences of the people who have lived in them. On the very western edge of Vancouver Island is a village whose name might be a coda to Canada. Ucluelet, it's called—from the Nootka expression for "safe landing place."

But Canada's place names are just one sign of our human presence on the land. From 10,000-year-old crude stone tools to the glass skyscrapers of our cities, evidence of human habitation is everywhere. We have changed the land, the air we breathe, the lakes we swim in and the ground we walk on, sometimes with sad results.

As Canada's population has grown, we have expanded our settlements outwards, leaving a human mark on an ever-increasing territory. We have cleared trees to feed demand for wood products, and we have built houses on prime farmland. We have used up precious resources to get to these new communities. We have purchased more and more vehicles, relying less on public transport, and the concomitant of this has been air pollution.

The effects are visible everywhere. Acid fog is killing the white birch trees of New Brunswick while a variety of factors has depleted cod stocks in the Atlantic provinces. Agricultural fertilizers, untreated human waste and other substances have encouraged the growth of algae in some lakes, which in turn deprives other creatures of oxygen. Mercury produced by industry is poisoning our loons.

We have made environmental mistakes; but we are also working to fix them. For instance, we have committed to reducing emissions of

greenhouse gases by 6% below 1990 levels by 2008–2012, as part of an attempt to address climate change.

The remediation of our environment is just the latest chapter in the history of our relationship to the land, a relationship that began more than 12 millennia ago with the first settlers of this continent.

## PRE-EUROPEAN SETTLEMENT

For at least 12,000 years, Native peoples had this land to themselves. The first inhabitants are thought to have migrated from Asia across a land bridge to what is now Alaska. Some stayed in what is now the Yukon Territory, which remained ice-free during the last ice age. Others moved southward along undetermined routes. After the glaciers retreated toward the North Pole, these Aboriginal inhabitants came northward again to repopulate much of what is now Canada.

The first people to inhabit the North American coast of the Arctic Ocean were the Paleoeskimoos who lived in skin tents. Their culture evolved into that of the Dorsets which was displaced between 1000 and 1200 AD by the Thule society of what is now Alaska. The Thules hunted whales in the summer and stored food in permanent winter houses made of stone and turf.

The Thule society became today's Inuit culture. After roughly 1700 AD, Inuit tribal groups emerged. These groups tended to comprise between 500 and 1,000 people, who gathered briefly in winter camps to hunt seals. Smaller bands of between two and five families were the main social unit for the rest of the year.

In the rain forest of coastal British Columbia, the northwest societies developed permanent villages along coasts and waterways. These settlements were based on fishing. People lived in large wooden houses facing the water, sometimes surrounded by defensive earthworks.

On the Prairies, tribes such as the Blackfoot were nomadic gatherers and bison hunters who occasionally settled in temporary villages. They





*Photo by Robert Bourdeau*

**Somewhere in Alberta.**



transported their belongings on a *travois*, a triangular frame of poles. After traders from the southern parts of North America introduced horses to the Prairies in the 1730s, families could transport greater quantities of goods this way. When they reached their campsite, they converted the *travois* to a teepee by standing it upright and covering it with buffalo skins. Before the early 1800s, when many Native people died during epidemics, there were about 33,000 Aboriginals living on what are now the Canadian Prairies.



A fascimile of a Viking sleeping bag, L'Anse aux Meadows.

In the fertile lowlands of the Great Lakes, the Woodlands people developed the only Native society based primarily on agriculture. They began growing corn around 500 AD, and by 1350 AD, they were also growing squash and beans. They protected their farms from rival tribes by enclosing their settlements in wooden palisades. The Iroquois, one of the Woodlands tribes, lived in villages of up to 2,000 people. Each village was a collection of longhouses—large wood and bark structures that each housed several families.

Along the fog-swept southeast coast of Newfoundland, the Beothuks lived in tents in the summer and dugout houses in winter. This small tribe, which has been estimated at between 500 and 1,000 people, fished and hunted sea animals.

Native cultures evolved in isolation from the rest of the world over thousands of years. Then the arrival of ships from the East changed everything.

## EUROPEAN SETTLEMENT

The earliest indication of European settlement in North America is the Norse site located at L'Anse aux Meadows, on the northern tip of Newfoundland's Great Northern Peninsula. Radiocarbon dating indicates that the Norse settled there only for a short time, sometime between 990 and 1050 AD.

In 1497, John Cabot became the first recorded European to spot mainland Canada, when he evidently sailed along the shorelines of what are today Newfoundland, Labrador and Nova Scotia. Other explorers followed in the 1500s, many hoping to find the famed "Northwest Passage" that would take them to the gold and spices of Asia.

When they didn't find the Passage, they settled for the fish, fur and lumber found in such abundance in this new land. Fish were, in fact, so plentiful in the Grand Banks off the coast of Newfoundland that the

fishermen of the day could simply scoop them up in open baskets. The beaver became a highly popular creature for its underfur which was used to make a type of top hat very fashionable throughout Europe until about 1830. The logging industry prospered in part because the vast forests of Eastern Canada were thick with oak and pine, two species particularly favoured by the English.

By the beginning of the 17th century, European demand for beaver pelts had led to the foundation of more permanent trading posts. Colonial powers then had the added stress of defending these economic interests with fortified towns.

Québec today reflects its past. What is now the city's Lower Town—a densely packed knot of buildings on the north shore of the St. Lawrence River—was once the site of the wharves and warehouses needed for the shipping trade. High above it, the Citadel still offers visitors a commanding view of the river, just as it did for colonial troops of the past.

Until the middle of the 18th century, most European settlements in Canada were located on the East Coast or along the St. Lawrence River. The first settlements in the Maritime colonies were mainly rough, unplanned villages where sailors came ashore to dry their fish before heading back to Europe.

The British government tried to prevent such settlements from taking root in Newfoundland by restricting house building and ownership of private land, until 1819. Today, the chaotic web of narrow streets leading down to the harbour in St. John's is evidence of this history. Since there was no central authority, illegal settlers put up buildings wherever they liked, and the roads followed suit.

The rulers of New France encouraged colonists, or *habitants*, to found farms in the wilderness. In southern Quebec today, closely spaced farms often line a river or road for miles. These "linear villages" are the legacy of the long-lot settlement system favoured in New France. Since each early settler needed the fresh water and easy transportation route the



Old Québec City.

Photo: LW John de Visser



## Legacies of Settlement

*Every street in every Canadian city bears its own legacy of settlement, but there is a street in Québec that holds more history than most. Named for King Louis XIII, the rue Saint-Louis is one of the oldest streets in the walled city.*

*A Loyalist fleeing the American Revolution built no. 87 on this street. In a house where no. 72 now stands, the body of an American general, who died attacking Québec in the same revolution, was prepared for burial.*

*Québécois novelist Phillippe Aubert de Gaspé lived at no. 34. A cannonball said to date from the 1759 bombardment of Québec lies trapped in the roots of a tree next to no. 59, which was once the home of Angélique Renaud d'Avène de Méloizes. Angélique was the mistress of François Bigot, the Intendant of New France from 1748 to 1760. At no. 25, Queen Victoria's father once lived with Mme de Saint-Laurent, who was also his mistress.*

rivers provided, and because taxes were based on the width of their farms, settlers built long, narrow lots stretching back from the river.

Britain had originally focussed its settlement efforts on the Thirteen Colonies, along what is now the eastern seaboard of the United States, but eventually it looked northward. When it did, it also created military cities to defend its interests. One example of such a colonial city is Halifax, founded in 1749.

Like Québec, Halifax has a commanding citadel. The city was founded as a counterpoint to the French fortress of Louisbourg on Cape Breton Island. The city that resulted was carefully planned. Thirty-five small blocks were laid out just below Citadel Hill.

## Central Canada

Canada's cities grew differently in the 1800s. Waterfronts became places to be opened to great ships and railway lines.

Toronto was founded in 1793 and became the largest city in Upper Canada less than 40 years later. A good harbour spurred its growth, as did its strong ties to American manufacturers and good roads into a prosperous agricultural hinterland.

Unlike the farmlands of New France, which were established before the roads were built, Upper Canada was laid out by surveyors who arrived around the same time as the settlers. In addition, engineering skills had evolved considerably in the 200-odd years since Champlain had founded Québec, so it was much easier to build roads. Surveyors laid out "townships," which still exist today and each township had a "baseline" road, to which other roads were built in parallel and perpendicular fashion. This created square blocks called concessions. Each concession was then divided into equal farm lots, each with access to the road. Many towns sprang up at the intersections of important roads and grew outward from that centre, instead of following the linear pattern of Quebec towns.



## Western Canada

In the late 1700s, explorers in search of new markets for European goods reached the west coast of what is now Canada. Sixty years later, the Fraser River gold rush of 1858 drew thousands of fortune seekers. The problem now became one of transportation in linking British Columbia with the eastern part of Canada. In 1871, when British Columbia decided to join Confederation, which had been forged four years previously, it did so on the strength of a promise of a railway.

After the railway came a great wave of settlement. The general manager of the Canadian Pacific Railway, William Van Horne, thought the small town of Granville near the railway's western terminus needed a grander name to suit its new status. The residents obligingly renamed it Vancouver. Vancouver boomed from a town of 1,000 people in 1886 to a city of roughly 29,000 by 1901.

"In more ways than one the completion of the railway in 1885 signalled the end of the small, confined, comfortable nation that had been pieced together in 1867," wrote author Pierre Berton. Today, some 1.8 million people live in the census metropolitan area of Vancouver.

Eager settlers also came to live on the Prairies. Between 1901 and 1911, Canada's population grew by more than a third, from 5.3 million to 7.2 million. Almost half of that growth took place on the Prairies. In this first decade of the century, Saskatchewan's population quintupled to 400,000, Alberta's population went from 73,000 to 374,000, and settlement in Manitoba grew from 255,000 to 461,000. Regina's population soared to 70,000 from just 7,700 people in 1901.

As in Upper Canada, intersecting roads were used in the Prairies to divide the land into identical squares. Because the land was unspoiled by settlers, and since few lakes or other natural features disrupted the landscape, the early-settling surveyors were able to create a near-perfect grid. With its great, flat spaces, the Prairies became a land of straight lines.

The grid system was also useful to townsite surveyors and many Prairie cities reflect this today. In downtown Regina, for instance, which was mapped out in the 1880s, straight north-south streets bearing names such as Broad Street and Albert Street are intersected at precise right angles by east-west numbered avenues.

## URBAN DWELLERS

Since the mid-1970s, Canadians have been leaving rural areas for urban destinations. Sometime between the 1921 and 1931 census counts, Canada's urban population first surpassed its rural population. By 1996, three in four Canadians lived in an urban area.

Canadians in some regions are more likely to live in the city than others. Four in five Ontarians live in or around cities, compared with only



A Ukrainian sod hut, built by settlers to Canada's prairies in the early 1900s.

two in five people in the Northwest Territories.

As well as clustering in cities, Canadians are congregated in a relatively narrow strip of land along the southeastern edge of the country. The most concentrated populations are found along the Québec–Windsor corridor, where population densities are as high as 6,729 people per square kilometre (in the City of Toronto). Still, to put this in context, the population density in Tokyo is roughly 17,000 people per square kilometre, while in Whitehorse it is slightly more than 40.

## Urbanscapes

Our urban neighbourhoods have changed since cities such as Halifax, Montréal and Toronto were founded. In many neighbourhoods built before the Second World War, houses were set close to the street and close together. In the days before automobile ownership was widespread, compact neighbourhoods were necessary because most people travelled to work on foot or by public transit.

In these older neighbourhoods, semi-detached and row houses are quite common. As well as being less expensive to build and heat than freestanding houses, they were also easily transformed. Before the advent of zoning by-laws, each floor could be easily converted into separate apartments, and the ground floor used for a shop or office.

Today, six out of every 10 new residential units built are single detached homes. In 1996 alone, builders hammered the first nails into almost 78,000 such buildings.

While some of these houses are being built in existing neighbourhoods, many are forming new subdivisions. Many of them owe their existence directly to the automobile. It was really in the early 1950s that people began moving from downtown out to the suburbs, where every family could have its own house, yard, and of course, garage.

In low-density suburbs, it is less economical to provide efficient public transit. At the end of the Second World War, Canadians used public transit at nearly three times the rate today. In 1996, each of us took an average of about 46 trips on city buses, subways and streetcars, compared with about 120 trips in 1945, the year the war ended.

In 1996, just 10% of the working population (1.2 million) reported taking a form of public transit to work. Commuters working in big cities are more likely to use public transit than other Canadians. In 1996, some 22% of employees in Toronto used public transit to get to and from work, as did 20% of those in Montréal.

Despite these figures, the majority of commuters are drivers. In 1996, nearly three-quarters of the working population (8.9 million) drove to work and another 7% (900,000 people) rode as a passenger with someone else driving.

## THE ENVIRONMENT

As we have expanded the girth of our urban centres, we have also affected the environment. For instance, houses, factories and office buildings are often built on prime agricultural land. The best farmland makes up just half of one percent of Canada's total land area. Roughly half of this land is located within an hour's drive of our 23 largest cities and more than one-third of it can be seen from the top of Toronto's CN Tower.

Our reliance on cars contributes to a range of environmental problems, including smog, acid rain and climate change. For example, a car with one occupant emits five times more carbon dioxide, 10 times more volatile organic compounds (VOCs) and a third more nitrogen oxides (NOx) per person over 100 kilometres than does a transit bus. The way we produce and use energy also creates emissions that are damaging to our environment.

## *H e a d s   o r   T a l e s ?*

*Legend has it that the town name of Drumheller was decided on a coin flip between two men: Samuel Drumheller, who bought the land in 1910, and its original owner, Thomas P. Greentree.*

*Both men must surely have had a sense of the importance of their coin flip because Drumheller was to become a national coal mining centre and was already promising to be a palaeontologist's dream with the discovery of fossils dating back 70 million years or more.*

*Settlers had begun moving into the area as early as the late 1800s. By 1913, Drumheller had been incorporated as a*

*village and in 1916, it became a town. But coal had been discovered there in the 1890s, and commercial mining had actually begun in the early 1900s.*

*Between 1911 and 1966, the Drumheller Valley mines produced 53 million metric tonnes of coal. (To carry away such an amount of coal by train would have required 1,092,102 rail cars of that era.)*

*By 1930, Drumheller was an industrial coal centre with some 27 large mines and many smaller ones, employing more than 2,000 men. But with the first major oil strike at Leduc, Alberta in 1947, large-scale coal production came to an end. In the*

*1960s, the mines of Drumheller were closed and for a time, the city and its environs were designated a depressed area.*

*Ironically, Drumheller's treasure-trove of fossils had already been at least partly unearthed in the search for coal. In 1884, the Geological Survey of Canada dispatched an expedition from Ottawa to examine the coal finds in Drumheller. The team was led by geologist Joseph Burr Tyrrell, one of Canada's greatest contemporary explorers. On June 9, 1884, Tyrrell unknowingly stumbled across large fossils, which were quickly sent back to Ottawa by horse and wagon. Although Tyrrell went on to*



*research and map vast tracts of western and northern Canada, he is most famous for his discovery on that June day when he hit upon the great dinosaur beds of Alberta.*

*In 1909, a local rancher on a visit to New York City told an employee at the American Museum of Natural History about the fossils and thus triggered the Great Canadian Dinosaur Rush between 1910 and 1912. The museum's chief fossil collector, Barnum Brown, headed north to dredge ancient bones, which he shipped home. By the time the dust had settled, Brown had sent a total of four boxcars.*

*In 1912, Ottawa hired American fossil*

*collector Charles Sternberg to examine the fossil-rich beds in the Drumheller Valley. He became Canada's best-known fossil hunter, adding a wealth of information and a vast collection of specimens to Canada's prehistoric archives.*

*In September 1985, Canada's only museum dedicated exclusively to the study of prehistoric life opened near the very spot where Tyrrell had found the first fossils a century earlier. The Royal Tyrrell Museum of Palaeontology was given the title "Royal" by Queen Elizabeth in 1990.*

*More than 800 fossils are on display in the museum as are more than 200,000*

*specimens of plants, soil and other ancient remains. The surrounding area, from which 25 species of dinosaurs were unearthed, now is protected land and one of the world's major fossil sites.*

*Today, Drumheller is a thriving community relying on oil, gas, agriculture and tourism. The remnants of the large Atlas Coal Mine, including the change rooms and rusted supply trucks, still stand as a tourist site established by the Dinosaur Valley Historical Society. On January 1, 1998, Drumheller was again incorporated as a town.*



National Archives of Canada, C-30620 and C-132141

Immigration posters such as these inspired hundreds of thousands of settlers to the Prairies from 1896 to the mid-1940s.





## THE AIR

Average levels of air pollution in Canadian cities have improved steadily since 1974. This is largely due to cleaner vehicles and fuel. The Air Quality Index shows that Canadians breathe “good” air most of the time. But there are still a number of days of “poor” air quality in many cities, and even today air pollution is affecting our health.



Photo by Andreus Uebe Little

Montréal.

Another deleterious consequence of air pollution is acid rain, which is caused by NO<sub>x</sub> and sulphur dioxide (SO<sub>2</sub>) undergoing chemical changes in the atmosphere. Because acid rain is up to 100 times more acidic than natural rain, it changes the chemical balance of lakes and rivers. It also causes metals to leach from the surrounding soils into the water supply, and makes it harder for lakes and rivers to support fish, plants and other life.

Between 1987 and 1997, a number of Canadian lakes and streams in areas prone to acid rain were monitored. During that time, 33% of those lakes improved, 11% grew more acidic and the rest stayed the same.

Acid rain is a particular threat in Ontario, Quebec, New Brunswick and Nova Scotia. This area lies directly in the path of much of the continent's SO<sub>2</sub> and NO<sub>x</sub> emissions and is also less able to absorb acid rain due to the non-porous granite that makes up most of the Canadian Shield. More than 40% of Canada's total land area—roughly 4 million square kilometres—is very sensitive to acid rain.

Smelters and fossil fuels used for energy are Canada's largest sources of SO<sub>2</sub>. Gas and other fossil fuels burned in transportation account for one-third of all NO<sub>x</sub> pollutants, while industrial processes and power plants are other major sources.

Acid precipitation has wide-ranging effects. Acid fog is killing white birch trees in southeastern New Brunswick, while across the country, SO<sub>2</sub> and its by-products are eating away at cement, limestone and sandstone. Even the buildings on Parliament Hill, in the nation's capital, have been damaged by acid rain.

In 1985, the seven provinces east of Saskatchewan joined together in the Canadian Acid Rain Control Program. They agreed to cut their total SO<sub>2</sub> emissions to 2.3 million tonnes a year by 1994. By 1993, they had surpassed this target. The following year, eastern Canadian SO<sub>2</sub> emissions totalled 1.7 million tonnes—less than half the 1980 levels.

Despite this progress, Canada still has a serious acid rain problem. Even in 2010, with full implementation of the Canadian and United States



acid rain programs, almost 800,000 square kilometres in southeastern Canada will receive harmful levels of acid rain (that is, above the environmental threshold). As a result, Canadian scientists have estimated that a further  $\text{SO}_2$  emission reduction (that is, beyond current commitments) of 75% in parts of eastern Canada and the United States would be required to protect sensitive ecosystems in the eastern provinces. A new Canada-wide acid rain strategy for beyond the year 2000 is now being developed.

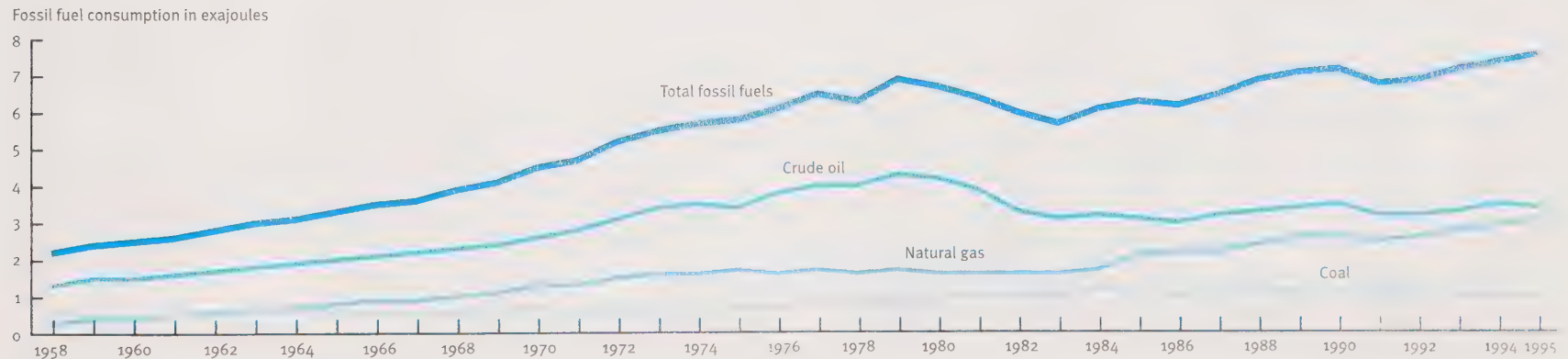
Our emissions of  $\text{NO}_x$  are also high; only the United States and Israel have higher levels per capita.

## Ozone Depletion

A thin layer of a gas called ozone in the earth's upper stratosphere, 15 to 50 kilometres above the earth, protects life on earth from deadly radiation. But certain chemicals, such as those used in some aerosol sprays, air conditioners and refrigerators, deplete that protective layer. "Holes," or thinning, in the ozone layer increase our exposure to ultraviolet rays, which can in turn lead to disease, such as skin cancer.

In 1987, Canada signed the Montréal Protocol, which called for the phase-out and eventual elimination of production and consumption of

Canadian consumption of fossil fuels



Source: Environment Canada. (One exajoule is enough energy to run the Montréal subway system for 1,000 years.)

major ozone-depleting substances. In that year, the amount of chlorofluorocarbons (CFCs) and other ozone-depleting substances that we produced and imported, less the amount we exported, peaked at 27.8 kilotonnes. Together, that weighs as much as 20,000 average North American cars. Since 1987, new supplies have declined steadily. In 1994, these substances totalled 5.7 kilotonnes—just a little over 20% of the level measured seven years previously.

Every time we switch on an air conditioner, we may be releasing CFCs into the environment. However, our consumption of CFCs and halons (another ozone-depleting substance) is slightly lower than that of most other OECD countries. In 1990, we consumed 0.6 kilograms per capita, the same amount as Spain and Denmark. On the other hand, France, Germany, the Netherlands and the United Kingdom all consumed more than one kilogram of these substances per capita.

## Climate Changes

Excessive levels of carbon dioxide (CO<sub>2</sub>) and other “greenhouse gases” in the atmosphere act much like insulation in a house. The earth normally reflects heat radiation back into space. But greenhouse gases trap some of that heat within the atmosphere, contributing to the “greenhouse effect” or global warming. Many scientists fear global warming could permanently change the earth’s climate. Today’s grain-growing areas, such as the Prairies, could become too dry to support agriculture, while coastal cities might be swamped as polar icecaps melt, raising ocean levels.

In 1992, more than 150 countries signed the UN Framework Convention on Climate Change, which recognized the need to control global emissions of greenhouse gases. As part of this Kyoto Protocol, Canada has agreed to reduce its emissions by 6% below 1990 levels by the period 2008–2012. For all the developed countries belonging to the protocol, overall emissions should be reduced by 5.2% below 1990 levels.

Some countries are successfully curbing their CO<sub>2</sub> emissions. The United Kingdom, for example, released less CO<sub>2</sub> in 1991 than it did in 1960. However, as of 1995, Canada ranked fourth in carbon dioxide output per capita among OECD countries. At 16 tonnes per capita, only the United States, Australia and Luxembourg ranked higher.

## WATER

Water is one of Canada’s most precious resources, and we use a lot of it. Between 1981 and 1991, the total amount of water we used rose by one-fifth, to 45,095 million cubic metres. Today, our annual water use equals about one-tenth the volume of Lake Erie. But only a fraction of that water—about one-twelfth—is not returned to a body of water after use. In the Great Lakes region, much of the water that is not returned evaporates from cooling systems in power plants.

More than half of all the water we use goes to thermal power plants (which produce electricity using steam produced by coal, petroleum, uranium or other sources), almost all of them in Ontario. The next largest user of water is the manufacturing sector, which withdraws roughly a quarter of the water used by thermal power plants.

Canada is home to about one-seventh of the world’s accessible fresh water. (Inaccessible fresh water includes frozen sources, such as glaciers, and water deep underground.) Such bounty may make some Canadians wonder why we need to be careful about our water use. The Great Lakes provide a cautionary tale.

Although the Great Lakes are a major source of fresh water, the land that surrounds the lakes on the Canadian side is one of the most densely populated and heavily farmed areas in the country. By the late 1950s, fertilizers from farms and phosphates from household detergents had leached into the lakes. These encouraged abnormal growth of algae, which began choking other forms of life out of the lakes. Controls on these

substances, instituted in the 1970s, have brought the algae problem under control.

Many of the fish that survived the algae were poisoned by other substances, particularly PCB (polychlorinated biphenyl). These substances can also harm people who eat contaminated fish. An American study showed that expectant mothers who had regularly eaten 12 kilograms or more of contaminated Great Lakes fish over a six-year period prior to becoming pregnant gave birth to smaller, more premature babies than women who had not eaten the fish.

The good news is that the Canadian federal government and the Ontario government are working closely with the United States to clean up the lakes. Part of this effort is our federal government's Great Lakes Cleanup Fund. Since 1994, the fund has invested more than \$35 million in more than 150 projects to develop solutions to pollution problems. These solutions include developing new technologies and rehabilitating wildlife habitat.

## FORESTS

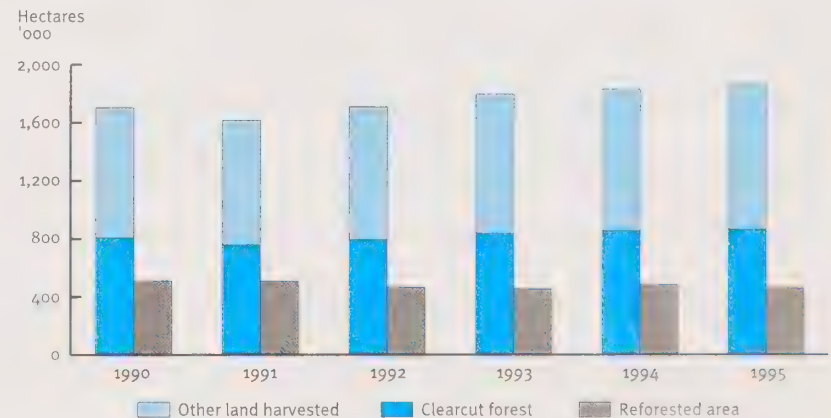
Canada has 10% of the world's forests and nearly half of our land area is covered in trees. More than half (56%) is commercially viable forest, but only 28% (119 million hectares) was being managed for timber purposes in the 1990s. Annually, Canada harvests less than half of one percent of its commercial forest area.

In 1995, some 1 million hectares of forest were harvested, while 440,000 hectares were planted with 665 million seedlings and 25,000 hectares seeded. Harvested areas regenerate naturally, or by planting or seeding. Under present forest management practices, two-thirds of the harvested forest areas will regenerate naturally, while the remaining third is restocked by planting, seeding and scarification (loosening the topsoil or forest floor to assist the seeding process).

Overall, harvested areas have increased by about a third since the 1970s. In 1975, some 680,000 hectares were harvested; by 1992, this had extended to 1 million hectares. The area that benefited from planting, seeding and scarification programs during this same period increased 263%: from 115,000 hectares in 1975 to 417,000 hectares in 1992. In addition, forest management techniques to assist natural regeneration have been improved and expanded in recent years.

In 1995, forest fires consumed 7 million hectares of forest, of which only 1 million hectares were timber productive. The majority (80%) of the fires occurred in the three Prairie provinces. More than half the fires were caused by human activities, usually in areas close to civilization; lightning strikes accounted for the other half, and they occurred in areas far from population centres.

Forest land harvested and reforested



Source: Statistics Canada, CANSIM matrices 6086, 6089.



## Confederation Dates

**1867** *The Dominion of Canada comes into being. Covering 950,000 km<sup>2</sup>, the inaugural provinces are Ontario, Quebec, New Brunswick and Nova Scotia. George-Étienne Cartier, one of the Fathers of Confederation, composes a song, **Avant tout, soyons Canadiens**. The thriving metropolis of this new land is Montréal, with 105,000 people, while Toronto has a mere 50,000 or so. Today, the census metropolitan area (CMA) of Montréal counts 3.3 million people and that of Toronto, 4.3 million.*

**1870** *An early version of Manitoba joins Confederation: it consists of 35,000 km<sup>2</sup> of land around the Red River and Portage la Prairie. The balance of what is now*

*Manitoba, as well as Saskatchewan and Alberta, acquired two years earlier from the Hudson's Bay Company, is transferred to Canada and becomes the Northwest Territories. From 1870 to 1876, Winnipeg is also the capital of the Northwest Territories. In 1871, Winnipeg's population is 241. Today, the CMA of Winnipeg counts 667,000 people.*

**1871** *British Columbia joins Confederation with the promise of a national railway. Victoria is the capital city with a population of 3,270. Today, the CMA of Victoria counts more than 300,000.*

**1873** *Prince Edward Island joins the infant Dominion, now into its seventh year. The*

*island is compelled to this action by its desire to ease a burden of debt incurred over the construction of an ambitious railway scheme. The Charlottetown Patriot records the public response as somewhat reluctant. The 1871 Census counts 8,807 people in Charlottetown, compared to 33,000 in its CMA in 1996.*

**1880** *Canada acquires the Arctic Archipelago from Britain. The islands are home to several thousand Inuit.*

**1898** *Yukon is established as a territory distinct from the Northwest Territories to better cope with the Klondike gold rush. Dawson City, serving an influx of goldseekers, grows to a population of 20,000*

*and is named the capital city until 1952, when the honour falls to Whitehorse. By the 1901 Census, the population count in Yukon Territory is 27,000. With the end of the gold rush, however, the population dwindles to about 4,000. Today, there are more than 31,000 people and more than 19,000 live in the CMA of Whitehorse.*

**1905** *The districts of Athabaska, Alberta, Saskatchewan and Assiniboia in the Northwest Territories are redefined as Alberta and Saskatchewan, the eighth and ninth provinces to join Canada. Saskatchewan's capital is Regina (formerly known as Pile O' Bones), and Edmonton*

*becomes the capital of Alberta.*

*To encourage settlement of the west, the government of Canada promises to continue the tradition of free homesteads. From 3% of the country's population in 1901, these two prairie provinces will be home to 12% of the population within a decade. Today, they account for about 13% of Canada's population.*

**1912** *The boundaries of Quebec, Ontario and Manitoba are extended north to Hudson Bay and Hudson Strait, redefining the Northwest Territories. Today, the population count of the Northwest Territories is nearly 68,000.*

**1949** *Newfoundland joins Canada after bitter debate over options which include responsible government or dominion status. The confederates win with a majority of 52%. The capital city is St. John's, with a population of 45,000 (as of the 1945 Census); today, the CMA of St. John's counts 174,000 people.*

**1999** *Nunavut is created when the Northwest Territories is divided into two. Nunavut, which means "our land" in the Inuit language of Inuktitut, covers nearly a quarter of Canada's land mass, and yet in 1995 is home to fewer than 25,000 people. Nunavut residents choose Iqaluit as their capital.*

## Wild Spaces

*Canada's first national park, Banff, came into being after two railway workers discovered a hot spring in the Rocky Mountains in 1883. Several people realized that the spring could be a great tourist draw and staked claims to the site. But the government decided to preserve the spring for all Canadians as a public park instead.*

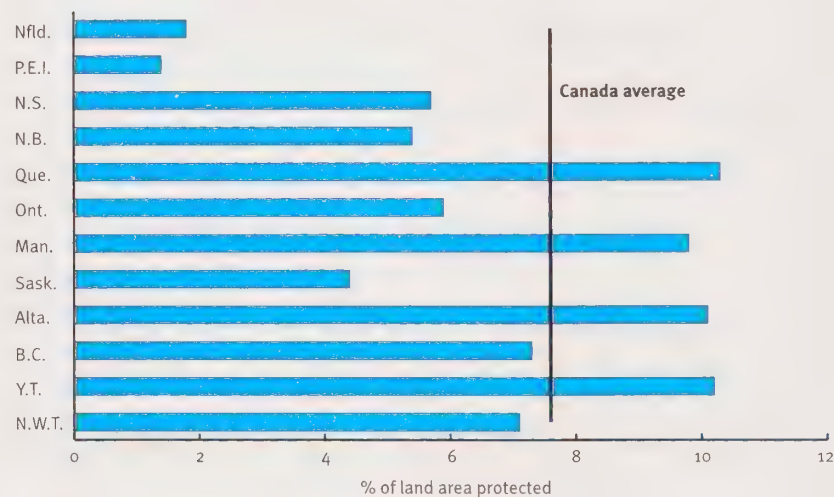
*Today, our national parks comprise more than 350,000 square kilometres of land. Wood Buffalo National Park, which borders Alberta and the Northwest Territories, is our largest national park and the world's second largest. Roughly the size of Switzerland, it is the only natural nesting site for whooping cranes and is home to an important wood buffalo herd.*

Fire is not wholly destructive: it has a natural role in the life cycle of many ecosystems. Canada's boreal forest is both destroyed and renewed by fire: new, vigorous trees quickly spring up in areas devastated by fire. At the same time as fire consumes stands of mature jack pines, it also forces open the seed cones, permitting the species to reproduce and survive.

Forest insects attacked nearly 13 million hectares of Canada's forests in 1995, causing severe defoliation. By far the worst hit—11 million hectares—was Ontario.

Canadians are working to balance economic needs with the need to preserve forests and the diverse species that live in them. Federal and

Protected land in Canada, 1996



Source: Statistics Canada, Catalogue no. 11-528-XPE.



provincial governments have promised to protect 12% of the country's total area from development. Since 1960, the amount of protected land and fresh water in Canada has almost quadrupled. By 1996, some 78.8 million hectares—an area bigger than Saskatchewan—was protected, accounting for almost 8% of Canada's total land and fresh water area.

## FARMLANDS

About 7% of Canada's mass, or 68 million hectares, is farmed. That's an area equal to almost all of Germany and Japan combined. The Prairie provinces—Alberta, Saskatchewan and Manitoba—contain 80% of the nation's farmland.

Agricultural chemical use is one of the major environmental concerns associated with farming. For instance, pesticides used on farms leach into nearby water sources, contaminating fish habitats. Canada has reduced or eliminated the use of many agricultural chemicals, such as chlordane and toxaphene. These chemicals have been linked to cancer, reproductive damage and other adverse health effects. Under the Montréal Protocol, Canada has also agreed to phase out most pesticide uses of methyl bromide, an ozone-depleting substance, by 2001.

Farmers use fertilizers to increase production and profit. They used 6.6% less chemical fertilizers per hectare of farmland in 1990 than they did in 1980, although the area of land they fertilized rose by one-sixth. In that 10-year period, the area of land fertilized increased 3.1 million hectares—an area roughly the size of Vancouver Island. Saskatchewan accounted for two-thirds of that increase. Farmers still use natural methods to replenish the soil: in 1995, some 60% of farms used manure.

*Our smallest national park is the St. Lawrence Islands National Park in Ontario, whose 6 square kilometres are scattered across 21 islands and 80 kilometres of the St. Lawrence River. Its unusual inhabitants include the rare black rat snake.*

*National parks are only one type of protected area. Others include nature reserves, natural monuments and other areas where human activity is limited in some way. Only the United States and Australia have larger areas of protected land.*

*In Canada, we have protected almost 900,000 square kilometres, an area roughly the size of France and Germany combined. These protected lands make up 9% of our total land mass.*



Work by Gerald McMaster, McMichael Canadian Art Collection

**No two tipis are ever pitched the same**

## AT RISK

The common loon, beloved resident of our cottage lakes and star of the one-dollar coin, is slowly being poisoned by mercury. In fact, the loons in Nova Scotia's Kejimikujik National Park have the highest level of mercury in their blood of any loons in North America. Not only that, but the reproduction rate of these birds is half that of loons in other parts of Eastern Canada. The Maritimes, which have been called "the tailpipe of North America," are the last landfall for concentrations of airborne mercury wafting across the continent.

Whenever we dispose of a product that contains mercury, such as a thermometer or a fluorescent light bulb, we may be putting mercury into the ecosystem. Many industries also use mercury to produce drugs, fungicide, chlorine, paint, plastic, pulp and paper, rayon and even dental fillings. Mercury is a particular threat to wildlife because it stays in the food chain for years: it doesn't break down when eaten. Mercury harms humans as well as animals.

People who have consumed too much mercury may develop a variety of symptoms, including loose teeth, numbness, weight loss, depression, weakening of the muscles and blindness—sometimes death results. Outbreaks of mercury poisoning in Northern Ontario and northern Quebec prompted various governments to limit mercury discharge and consumption of fish in those areas, beginning in the 1970s.

There are 193 known species of mammals, 514 known species of birds and 1,066 known species of fish in Canada. In 1997, 15 of them were added to the list of species at risk, including the British Columbia and Prairie populations of the sage grouse, British Columbia's great blue herons and the monarch butterfly.

Yet we are doing better than some countries at preserving our wildlife. According to 1995 statistics from the OECD, about one in 12 of our known species of mammals are threatened, as are roughly one in 20 of

## Bald Eagle

*Societies as varied as those of ancient Egypt, Napoleonic France and revolutionary America have revered the eagle as a symbol of power.*

*But with its 1.8-metre wingspan and white head, this stately creature has now been hunted nearly to extinction. Once found in fairly sizeable numbers around the Great Lakes area, the population of the bald eagle fell dramatically in the 1950s, especially with the added dangers of pesticides, which affected its ability to reproduce.*

*By 1980, only three couples could be found and they were all living on the Canadian shore of Lake Erie, and were not reproducing.*

*As a result, scientists went to work and in 1983 began releasing healthy bald eagles onto Lake Erie's Long Point peninsula. By 1992, the clan had expanded to include nine nests and 12 naturally raised eaglets.*

*Although scientists believe more clean-up is required before the Great Lakes can support large populations of bald eagles, they are cautiously optimistic that day will come.*



our fish and bird species. These are some of the lowest numbers among the OECD countries.

## POLLUTION CONTROLS

Between 1986 and 1994, federal government spending on measures to prevent and control pollution more than doubled. Between 1989 and 1991, provincial spending rose nearly 60%, then declined slightly in 1992. Municipal governments, which often have primary responsibility for tasks such as collecting sewage and garbage, spent the most on pollution control. Between 1988 and 1991, municipal expenditures rose steadily, and then levelled off so that in 1993, municipal governments spent \$3.2 billion to prevent and control pollution.

“Think globally, act locally” is one of the environmental movement’s favourite slogans. While our governments are thinking globally, Canadians are acting locally.

For one thing, we’re recycling. In 1994, more than half of us had access to recycling programs for paper, cans, glass bottles and plastics—and more than eight in 10 people with such access recycled. People in some provinces are keener recyclers than others: almost nine out of 10 people with access to recycling programs in B.C. and Ontario use them, while less than half of Newfoundlanders with access do so.

On other environmentally sensitive practices, provincial habits vary widely. Newfoundlanders are the most likely to buy paper towels or toilet paper made from recycled paper, while Manitobans bring their own bags when they go shopping more than do the rest of us. Prince Edward Islanders lower their thermostats more than other Canadians, and Quebeckers are the most likely to have a water-saving shower head.

## SOURCES

Canada Mortgage and Housing Corporation  
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Natural Resources Canada  
Organisation for Economic Co-operation and Development  
Statistics Canada  
United Nations

### FOR FURTHER READING

Selected publications from Statistics Canada

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- **Households and the Environment.** Occasional. 11-526-XPB
- **Databases for Environmental Analysis.** 1992. 11-527E
- **Environmental Perspectives: Studies and Statistics.** Occasional. 11-528-XPE
- **A National Overview: Population and Dwelling Counts.** Census. 93-357-XPB

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- **Canadian Housing Statistics 1996.** Canada Mortgage and Housing Corporation. 1997.
- **Conserving Canada's Natural Legacy** (CD-ROM). Environment Canada. 1996.
- **The State of Canada's Forests 1995-1996.** Natural Resources Canada. 1996.
- **Stratospheric Ozone Depletion.** Environment Canada. 1997.
- **Sustainable Development: OECD Policy Approaches for the 21st Century.** Organisation for Economic Co-operation and Development. 1997.
- **United Nations Energy Statistics Yearbook 1994.** 1996.
- **United Nations Statistical Yearbook.** 1996.

## The Legacy of Settlement

### Legend

- nil or zero	.. not available	x confidential
- too small to be expressed	... not applicable or not appropriate	(Certain tables may not add due to rounding)

### 2.1 Federal Government Spending on Pollution

	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994	1994-1995
	\$ thousands									
Pollution abatement and control expenditures <sup>1</sup>	445,727	498,091	530,011	610,270	690,326	703,176	714,158	750,593	824,296	773,919
Sewage collection and disposal	-	-	-	-	-	-	150	275	83,000	94,553
Pollution control	61,983	67,297	87,142	113,085	118,855	20,221	4,329	4	7,399	5,855
Other environmental services	383,744	430,794	442,869	497,185	571,471	682,955	709,679	750,314	733,897	673,511

1. There are no federal government expenditures on waste collection and disposal.

Source: Statistics Canada, Catalogue no. 11-528-XPE.

### 2.2 New Supplies<sup>1</sup> of Ozone-Depleting Substances

	Total	Chlorofluorocarbons (CFCs)	Other ozone- depleting substances	Gross domestic product
		kilotonnes		\$ constant 1986 (billions)
1986	24.9	19.9	5.0	628.58
1987 <sup>2</sup>	27.8	21.2	6.6	654.36
1988	27.6	21.0	6.6	686.18
1989	23.5	18.8	4.7	703.58
1990	16.6	13.1	3.5	705.46
1991	11.7	8.8	2.9	692.25
1992	12.3	10.7	1.6	698.54
1993	5.8	4.5	1.3	716.12
1994	6.2	4.9	1.3	744.22
1995	5.8	4.8	1.0	760.31
1996	1.0	0.2	0.8	769.73

1. New supplies are production of ozone-depleting substances in Canada, plus importation minus exportation.

2. The Montréal Protocol. This Protocol was signed in 1987, calling for the phase-out of production of major ozone-depleting substances.

Source: Environment Canada, *Stratospheric Ozone Depletion*, National Environmental Indicator Series.



2.3 Provincial, Territorial and Municipal Government Spending on Pollution<sup>1</sup>

		Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
\$ thousands														
<b>Provincial and territorial governments</b>														
<b>Pollution abatement and control expenditures</b>	<b>1991</b>	<b>1,050,062</b>	<b>3,239</b>	<b>6,530</b>	<b>37,304</b>	<b>50,145</b>	<b>157,476</b>	<b>325,708</b>	<b>17,339</b>	<b>151,500</b>	<b>94,234</b>	<b>202,597</b>	<b>3,168</b>	<b>821</b>
	<b>1992</b>	<b>936,508</b>	<b>5,174</b>	<b>7,206</b>	<b>30,893</b>	<b>44,264</b>	<b>170,805</b>	<b>315,255</b>	<b>21,255</b>	<b>48,486</b>	<b>94,639</b>	<b>194,604</b>	<b>3,212</b>	<b>715</b>
	<b>1993</b>	<b>941,616</b>	<b>6,244</b>	<b>6,685</b>	<b>22,651</b>	<b>49,812</b>	<b>159,322</b>	<b>310,104</b>	<b>27,561</b>	<b>65,910</b>	<b>97,579</b>	<b>192,586</b>	<b>2,357</b>	<b>804</b>
	<b>1994</b>	<b>894,815</b>	<b>9,343</b>	<b>20,868</b>	<b>24,334</b>	<b>69,889</b>	<b>119,714</b>	<b>273,880</b>	<b>34,755</b>	<b>41,470</b>	<b>109,711</b>	<b>184,861</b>	<b>5,217</b>	<b>773</b>
Sewage collection and disposal <sup>2</sup>	1991	100,597	—	—	92	8,191	—	—	—	64	—	89,873	2,377	—
	1992	97,741	—	933	47	6,730	—	—	—	49	—	87,715	2,268	—
	1993	79,853	—	170	446	5,435	—	—	—	—	—	71,911	1,891	—
	1994	103,750	—	—	10,000	4,183	20,681	—	—	—	—	64,579	4,306	—
Waste collection and disposal	1991	156,545	261	3,170	12,672	5,907	—	73,066	6,493	8	40,108	14,657	202	—
	1992	161,330	361	3,710	7,483	8,483	—	80,391	6,659	—	42,575	11,446	223	—
	1993	126,440	348	3,791	599	8,214	—	65,071	11,443	9,378	27,552	—	42	—
	1994	118,081	414	18,743	—	6,210	—	22,859	9,330	10,386	50,037	—	102	—
Pollution control	1991	341,901	2,956	348	6,103	18,420	—	240,212	746	29,730	42,626	—	—	759
	1992	295,129	3,014	286	2,248	16,910	—	220,643	393	4,579	44,667	1,684	—	105
	1993	316,364	3,292	423	2,066	18,022	—	236,802	35	5,627	50,096	—	—	—
	1994	242,652	7,464	452	2,795	8,799	—	177,971	601	5,885	38,685	—	—	—
Other environmental services	1991	451,019	22	3,012	18,437	17,627	157,476	12,430	10,100	121,699	11,500	98,067	589	62
	1992	382,309	1,799	2,277	21,115	12,142	170,805	14,221	14,203	43,859	7,397	93,758	722	10
	1993	418,958	2,604	2,301	19,540	18,140	159,322	8,231	16,083	50,905	19,931	120,675	423	304
	1994	430,333	1,465	1,673	11,539	50,696	99,033	73,051	24,824	25,199	20,989	120,281	809	712
<b>Local governments</b>														
<b>Pollution abatement and control expenditures</b>	<b>1991</b>	<b>3,263,443</b>	<b>33,607</b>	<b>3,430</b>	<b>105,622</b>	<b>59,567</b>	<b>823,321</b>	<b>1,500,246</b>	<b>82,422</b>	<b>55,560</b>	<b>219,391</b>	<b>357,103</b>	<b>4,901</b>	<b>18,273</b>
	<b>1992</b>	<b>3,258,664</b>	<b>31,859</b>	<b>3,633</b>	<b>82,440</b>	<b>58,102</b>	<b>778,120</b>	<b>1,494,662</b>	<b>121,135</b>	<b>58,223</b>	<b>220,652</b>	<b>384,044</b>	<b>6,936</b>	<b>18,858</b>
	<b>1993</b>	<b>3,183,478</b>	<b>32,300</b>	<b>3,141</b>	<b>113,955</b>	<b>63,574</b>	<b>759,279</b>	<b>1,350,010</b>	<b>92,168</b>	<b>63,418</b>	<b>269,523</b>	<b>404,564</b>	<b>6,432</b>	<b>25,114</b>
	<b>1994</b>	<b>3,804,806</b>	<b>24,342</b>	<b>3,089</b>	<b>140,457</b>	<b>63,933</b>	<b>1,068,108</b>	<b>1,493,282</b>	<b>93,294</b>	<b>117,542</b>	<b>268,581</b>	<b>500,502</b>	<b>10,438</b>	<b>21,238</b>
Sewage collection and disposal	1991	1,954,272	19,420	2,580	63,118	42,898	537,628	838,006	55,495	37,362	146,430	192,799	4,216	14,320
	1992	1,899,753	18,450	2,558	40,592	40,963	471,149	826,209	89,248	37,129	139,037	213,709	6,105	14,604
	1993	1,869,010	19,996	2,127	72,645	45,536	433,920	750,029	61,193	43,356	188,897	227,954	5,549	17,398
	1994	2,357,364	11,959	1,972	87,295	45,805	699,218	835,099	58,384	97,687	178,087	315,847	9,490	16,521
Waste collection and disposal	1991	1,228,222	14,183	667	41,172	14,825	267,306	607,933	26,043	17,993	72,961	160,562	684	3,393
	1992	1,274,745	13,405	882	41,401	15,258	292,196	606,829	31,123	20,787	81,615	166,224	831	4,194
	1993	1,228,072	12,300	825	40,843	16,066	300,507	546,422	30,220	19,761	80,626	172,373	883	7,041
	1994	1,355,882	12,379	928	52,737	16,130	334,091	609,580	34,156	19,555	90,494	180,227	948	4,651
Other environmental services <sup>3</sup>	1991	80,949	4	183	1,332	1,844	18,387	54,307	884	205	—	3,742	1	10
	1992	84,166	4	193	447	1,881	14,775	61,624	764	307	—	4,111	—	30
	1993	86,396	4	189	467	1,972	24,852	53,559	755	301	—	4,237	—	61
	1994	91,560	4	189	425	1,998	34,799	48,603	754	300	—	4,428	—	60

1. Local government expenditures exclude transfers between municipalities. Provincial/territorial government expenditures include intergovernmental transfer payments.

2. Some provinces and territories report their sewage expenditures under water supply expenditures, which are not considered as environmental protection expenditures.

3. Local government expenditures on other environmental services may include expenditures specific to pollution control.

Source: Statistics Canada, Catalogue no. 11-528-XPE.

2.4 International Emissions of CO<sub>2</sub>

	1960 <sup>1</sup>	1970 <sup>2</sup>	1980 <sup>3</sup>	1990 <sup>4</sup>	1994
CO <sub>2</sub> emissions					
From fossil fuel combustion and cement manufacturing					
kilotonnes					
<b>World</b>	<b>2,498,367</b>	<b>3,854,546</b>	<b>5,079,161</b>	<b>..</b>	<b>..</b>
<b>Canada</b>	<b>52,700</b>	<b>90,610</b>	<b>117,399</b>	<b>111,399</b>	<b>121,712</b>
Australia	24,060	38,884	55,348	69,112	75,912
Austria	8,394	13,729	14,247	15,419	15,586
Belgium	25,033	34,396	34,860	26,888	27,974
Denmark	8,141	16,920	17,254	14,068	17,007
Finland	4,132	10,997	15,036	14,502	14,571
France <sup>5</sup>	74,791	116,176	132,129	96,648	88,196
Germany	..	..	..	..	219,612
Federal Republic of Germany	148,614	200,840	207,885	184,750	..
Former German Democratic Republic	71,940	73,845	83,678	81,495	..
Greece	2,545	6,559	14,031	19,715	20,804
Iceland	331	379	509	552	549
Ireland	3,039	4,915	6,845	8,137	9,001
Italy <sup>6</sup>	301,434	779,554	1,015,644	107,858	106,947
Japan	63,997	202,973	254,881	288,063	303,267
Luxembourg	3,175	3,755	2,902	2,636	2,765
Netherlands	20,173	34,813	41,704	38,011	36,900
New Zealand	3,167	3,884	4,802	6,575	7,360
Norway	3,582	6,846	10,919	14,289	11,712
Portugal	2,248	3,716	7,396	11,345	12,723
Spain	13,423	30,194	54,596	57,990	59,371
Sweden	13,454	25,179	19,494	13,379	13,668
Switzerland	53,465	107,805	111,695	11,815	11,201
Turkey	4,587	11,504	20,741	40,008	44,752
United Kingdom	160,770	175,397	160,551	155,476	149,741
United States	799,544	1,165,477	1,261,778	1,293,219	1,387,256

1. Emissions include a contribution from gas-flaring activities for Canada and the United States.

2. Emissions include a contribution from gas-flaring activities for Canada, Japan, the Netherlands, New Zealand, the United Kingdom and the United States.

3. Emissions include a contribution from gas-flaring activities for Canada, France, Japan, the Netherlands, New Zealand, Norway, the United Kingdom and the United States.

4. Emissions include a contribution from gas-flaring activities for Canada, Denmark, Germany, Greece, the Netherlands, Norway, Spain, the United Kingdom and the United States.

5. Includes Monaco for CO<sub>2</sub> emissions.

6. Includes San Marino for CO<sub>2</sub> emissions.

Source: United Nations, *Statistical Yearbook*, 1997.

2.5 Air Quality Index,<sup>1, 2</sup> Selected Cities

	1990	1991	1992	1993	1994	1995
Total number of days <sup>3</sup>						
<b>St. John's (Nfld.)</b>						
Poor	—	—	—	—	..	—
Fair	25	21	15	2	..	8
Good	340	344	351	363	..	357
<b>Halifax (N.S.)<sup>4</sup></b>						
Poor	..	..	..	1	1	1
Fair	..	..	..	24	22	30
Good	..	..	..	339	342	334
<b>Montréal (Que.)</b>						
Poor	3	4	6	3	3	5
Fair	75	59	66	59	54	95
Good	287	303	294	303	308	265
<b>Québec (Que.)</b>						
Poor	—	—	7	—	1	
Fair	52	72	72	70	42	
Good	313	293	287	295	322	
<b>Ottawa (Ont.)</b>						
Poor	1	4	4	9	3	3
Fair	65	50	59	48	48	53
Good	299	310	303	308	314	309
<b>Toronto (Ont.)</b>						
Poor	16	29	9	12	14	14
Fair	136	155	89	110	168	183
Good	213	181	268	243	183	169
<b>Hamilton (Ont.)</b>						
Poor	28	31	19	22	22	23
Fair	138	142	112	121	133	158
Good	199	193	236	222	210	184
<b>Winnipeg (Man.)</b>						
Poor	15	23	13	3	—	7
Fair	103	68	48	53	67	69
Good	247	274	305	309	298	289
<b>Regina (Sask.)</b>						
Poor	19	—	19	6	—	
Fair	102	58	55	43	59	43
Good	244	307	292	315	306	322



2.5 Air Quality Index,<sup>1, 2</sup> Selected Cities (concluded)

	1990	1991	1992	1993	1994	1995
	Total number of days <sup>3</sup>					
<b>Edmonton (Alta.)</b>						
Poor	—	14	15	12	18	14
Fair	158	117	152	136	135	82
Good	207	234	200	216	213	270
<b>Calgary (Alta.)</b>						
Poor	1	35	18	44	23	22
Fair	149	156	142	121	132	123
Good	216	174	206	200	210	219
<b>Vancouver (B.C.)</b>						
Poor	2	7	—	—	1	—
Fair	37	39	26	32	12	8
Good	326	319	340	333	352	357

1. Air pollution measurements were obtained from the National Air Pollution Surveillance Network.

2. Index of the Quality of Air converts air pollutant data for SO<sub>2</sub>, NO<sub>2</sub>, CO, Ozone and Total Suspended Particulate to a common scale, and the Index is expressed as the number of days of poor, fair and good.

3. The values in the table represent city averages (from all Index sites) normalized for 365 days and 366 days for 1992.

4. In order to calculate an Index, complete data for Ozone and Total Suspended Particulate are necessary as a minimum.

Source: Environment Canada, *Air Quality Indicators Database*, 1997.

## 2.6 Household Environmental Practices, 1994

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
% of households											
<b>Access to recycling programs</b>											
Paper	69.6	19.7	20.8	50.3	46.7	57.2	83.5	61.0	69.3	71.2	74.5
Metal cans	67.2	21.3	16.7	47.6	69.8	48.9	82.3	61.0	77.3	72.2	69.6
Glass bottles	67.4	12.0	18.8	47.3	72.9	50.1	82.0	58.9	74.8	72.6	70.7
Plastics	62.8	18.6	16.7	42.5	61.2	49.5	77.7	61.0	73.7	66.2	55.7
Special disposal	40.2	3.3	10.4	12.0	12.2	41.8	45.9	29.0	34.9	56.9	32.2
<b>Use of recycling programs<sup>1</sup></b>											
Paper	83.1	44.4	70.0	72.5	58.8	74.0	92.9	48.3	73.2	75.8	88.2
Metal cans	83.5	48.7	62.5	69.6	81.5	70.7	93.3	51.2	81.0	78.7	86.0
Glass bottles	83.5	40.9	66.7	68.8	82.8	70.9	93.3	46.2	81.1	78.8	86.1
Plastics	81.7	47.1	62.5	67.4	77.6	71.4	92.2	51.2	80.8	70.8	82.4
Special disposal	57.1	66.7	80.0	65.0	64.5	54.5	60.1	48.7	46.8	53.8	59.1
<b>Use of disposable diapers<sup>2</sup></b>											
All of the time	76.9	92.3	100.0	68.2	82.4	81.9	79.0	70.4	62.5	67.1	73.2
Most of the time	9.5	7.7	--	13.6	5.9	10.2	7.6	7.4	12.5	11.8	13.4
Sometimes	11.1	--	--	--	--	--	11.3	--	25.0	19.7	12.2
Never	2.0	--	--	4.5	5.9	1.7	2.1	--	--	--	--
Children not in diapers	--	--	--	--	--	--	--	--	--	--	--
Regularly purchase paper towels or toilet paper made from recycled paper	58.3	68.3	56.3	65.7	66.3	60.7	59.9	48.6	49.3	51.5	53.9
Regularly take their own bag when shopping	24.4	4.4	12.5	14.8	22.7	17.6	25.4	35.0	32.7	31.3	31.1
Use a compost heap, compost container or composting service	22.7	9.3	16.7	19.0	16.1	7.9	30.3	18.1	21.6	21.2	37.9
Use chemical pesticides <sup>3</sup>	31.1	9.4	11.6	18.7	19.7	29.8	34.3	30.1	37.2	36.1	29.6
Use chemical fertilizer <sup>3</sup>	46.8	26.4	23.3	35.3	35.8	41.4	50.7	38.5	57.0	58.1	47.2
Have programmable thermostat <sup>4</sup>	16.0	5.6	6.7	9.4	9.1	9.7	23.6	14.9	10.2	15.1	15.3
Regularly lower temperature <sup>5</sup>	71.1	82.1	87.8	82.4	75.3	70.5	64.4	65.9	77.0	72.0	81.0
Use energy-efficient compact fluorescent light bulbs	18.9	8.2	20.8	13.3	17.6	14.2	24.6	13.1	14.1	15.9	20.0
Have water-saving, low-flow or modified shower head	42.3	27.9	33.3	40.7	42.4	46.0	44.9	34.0	26.6	32.2	43.4
Have water-saving, low-volume toilet	14.8	6.0	6.3	12.7	11.4	8.7	18.0	19.4	12.5	20.6	15.9
Have water filter or purifier for drinking water	19.5	9.8	2.1	16.3	14.1	9.7	24.9	18.4	22.7	16.4	29.1
Purchase bottled water	21.9	8.7	6.3	18.1	16.9	33.4	19.6	13.4	8.9	15.3	19.9
<b>Principal method of travel to work<sup>6</sup></b>											
Public transit	13.7	--	--	6.7	2.7	14.9	16.3	10.1	3.7	11.2	14.4
Motor vehicle as driver	78.8	79.3	85.7	80.0	82.7	76.6	79.7	78.5	80.4	80.3	77.8
Motor vehicle as passenger	10.6	18.5	17.9	16.9	17.3	9.6	10.0	13.4	11.0	9.5	10.7
Bicycle	2.3	--	--	--	--	2.0	1.9	5.3	4.1	2.4	3.7
Walk only	7.8	12.0	--	8.7	6.7	8.5	6.3	11.3	11.4	7.4	8.7
Other	0.3	--	--	--	--	--	--	--	--	--	--
Not ascertained	5.8	5.4	--	6.7	6.7	6.2	5.5	5.3	7.3	6.3	5.2

1. Percentage calculated among households with access to each type of program.

2. Percentage calculated among households with children under 2 years old.

3. Percentage calculated among households with a lawn, yard or garden.

4. Percentage calculated among households with thermostats.

5. Percentage calculated among households with thermostats, excluding households with programmable thermostats.

6. Percentage calculated among households where at least one member worked outside the home.

Source: Statistics Canada, Catalogue no. 11-526.

## 2.7 Water Use

		Water withdrawals						Water consumption
		Total withdrawals water	Agriculture	Mining	Manufacturing	Thermal power	Municipal	
cubic metres (millions)								
Canada	1981	37,254	3,125	648	9,937	19,281	4,263	3,892
	1986	42,217	3,559	593	7,984	25,364	4,717	4,279
	1991	45,095	3,991	363	7,282	28,357	5,102	5,367
Atlantic provinces	1981	2,882	12	86	640	1,837	307	127
	1986	4,012	13	212	958	2,490	339	193
	1991	3,175	15	77	601	2,126	356	118
Quebec	1981	4,185	82	107	2,319	308	1,369	416
	1986	4,132	89	52	1,521	986	1,484	387
	1991	4,498	100	74	1,616	1,005	1,703	383
Ontario	1981	21,066	148	124	4,414	14,930	1,450	715
	1986	25,598	166	100	3,763	19,967	1,602	794
	1991	28,485	186	87	3,457	23,095	1,660	512
Prairie provinces	1981	5,342	2,338	197	382	1,846	579	1,981
	1986	5,729	2,688	142	357	1,867	675	2,254
	1991	6,221	3,014	50	447	2,025	685	3,630
British Columbia <sup>1</sup>	1981	3,779	545	134	2,182	360	558	653
	1986	2,746	603	87	1,385	54	617	651
	1991	2,716	676	75	1,161	106	698	724

1. Includes the Yukon Territory and Northwest Territories.

Source: Environment Canada, Water and Habitat Conservation Branch.

## 2.8 Reforestation

	1992		1993		1994		1995	
	Seeded	Seedlings	Seeded	Seedlings	Seeded	Seedlings	Seeded	Seedlings
hectares								
Canada	31,600	434,183	35,150	421,103	31,205	454,267	25,244	436,307
Newfoundland	120	3,411	—	2,790	—	3,051	—	3,453
Prince Edward Island	—	1,161	—	1,227	—	739	—	837
Nova Scotia	—	7,502	—	5,213	—	6,432	—	7,186
New Brunswick	—	16,526	—	13,089	161	15,399	—	16,162
Quebec	120	97,189	66	84,491	167	72,662	842	75,796
Ontario	24,466	71,792	28,000	73,684	28,200	73,580	22,890	64,711
Manitoba	—	7,142	13	5,646	—	6,769	22	5,697
Saskatchewan	—	6,403	60	6,619	45	7,081	—	7,547
Alberta	6,893	38,080	7,011	37,934	2,590	51,230	1,490	47,745
British Columbia	—	184,922	—	190,176	40	216,811	—	206,473
Yukon Territory	—	—	—	174	—	417	—	619
Northwest Territories	1	55	—	60	2	96	—	81

Source: Statistics Canada, CANSIM, matrix 6089.



## 2.9 Forest Land Harvested and Clear-Cut

	1992		1993		1994		1995	
	Total harvested	Clear-Cut	Total harvested	Clear-Cut	Total harvested	Clear-Cut	Total harvested	Clear-Cut
<b>Canada</b>	<b>906,243</b>	<b>797,178</b>	<b>959,524</b>	<b>838,502</b>	<b>977,403</b>	<b>856,843</b>	<b>1,011,328</b>	<b>866,435</b>
Newfoundland	18,391	18,391	21,076	20,640	19,643	19,523	19,731	19,612
Prince Edward Island	2,550	1,345	3,148	1,451	3,258	3,107	3,131	3,112
Nova Scotia	33,932	33,932	43,568	42,780	49,084	47,646	49,968	49,087
New Brunswick	99,696	76,477	97,793	77,278	92,790	72,364	98,000	75,000
Quebec	255,217	219,423	286,718	283,951	298,091	241,246	357,443	274,797
Ontario	190,676	172,804	206,000	186,000	209,700	190,800	211,660	198,910
Manitoba	11,414	11,414	10,993	10,993	12,653	12,653	14,176	14,176
Saskatchewan	18,471	18,471	19,456	19,456	24,221	24,221	21,907	21,907
Alberta	53,253	53,253	61,871	61,871	75,059	75,059	44,371	44,371
British Columbia	221,599	190,624	207,748	177,929	190,244	167,564	189,608	164,130
Yukon Territory	639	639	634	634	2,056	2,056	833	833
Northwest Territories	405	405	519	519	604	604	500	500

Source: Statistics Canada, CANSIM, matrix 6086.

## 2.10 Forest Fires, 1995

	Forest fires				Forest land burned			
	Total forest fires	Due to human activities	Due to lightning	Due to unknown cause	Total forest land burned	Due to human activities	Due to lightning	Due to unknown cause
	number				hectares			
<b>Canada</b>	<b>8,367</b>	<b>4,772</b>	<b>3,395</b>	<b>200</b>	<b>6,569,416</b>	<b>371,055</b>	<b>6,194,930</b>	<b>3,431</b>
Newfoundland	103	86	17	—	794	302	492	—
Prince Edward Island	29	14	—	15	36	16	—	20
Nova Scotia	408	354	4	50	405	370	1	34
New Brunswick	547	395	81	71	416	292	46	78
Quebec	1,145	662	483	—	195,576	122,352	73,224	—
Ontario	2,122	975	1,115	32	612,437	42,102	570,118	217
Manitoba	660	264	396	—	889,248	10,532	878,716	—
Saskatchewan	650	295	355	—	1,386,929	51,420	1,335,509	—
Alberta	804	419	358	27	342,610	10,198	329,342	3,070
British Columbia	1,474	1,132	342	—	48,080	19,715	28,365	—
Yukon Territory	148	71	77	—	258,403	579	257,824	—
Northwest Territories	215	72	139	4	2,827,400	111,814	2,715,575	11
National parks	62	33	28	1	7,082	1,363	5,718	1

Source: Statistics Canada, CANSIM, matrix 6081.

## 2.11 Species Extinct or at Risk, 1997

	Mammals, land and sea	Birds	Fish	Molluscs	Reptiles and amphibians	Lepidoptera	Plants, mosses and lichens
Extinct <sup>1</sup>	Caribou, Woodland (Queen Charlotte Islands population) (1935) Mink, Sea (1894)	Auk, Great (1844) Duck, Labrador (about 1875) Pigeon, Passenger (1914)	Cisco, Deepwater (1952) Cisco, Longjaw (1975) Dace, Banff Longnose (1986) Walleye, Blue (1965)	Limpet, Eelgrass (1929)			
Extirpated <sup>2</sup>	Bear, Grizzly (Prairie population) Ferret, Black-footed Fox, Swift Walrus, Atlantic (Northwest Atlantic population) Whale, Gray (Atlantic population)	Grouse, Sage (B.C. population) Prairie Chicken, Greater	Chub, Gravel Paddlefish		Lizard, Pygmy Short-horned	Butterfly, Karner Blue (1977)	Blue-eyed Mary Trefoil, Illinois Tick
Endangered <sup>3</sup>	Caribou, Peary (Banks Island and High Arctic populations) Cougar (Eastern population) Marmot (Vancouver Island) Marten (Newfoundland population) Wolverine (Eastern population) Whale, Beluga (St. Lawrence River Ungava Bay and Southeast Baffin Island- Cumberland Sound populations) Whale, Bowhead (Eastern and Western Arctic populations) Whale, Right	Bobwhite, Northern Crane, Whooping Curlew, Eskimo Duck, Harlequin (Eastern population) Falcon, Anatum Peregrine Flycatcher, Acadian Owl, Burrowing Owl, Spotted Plover, Mountain Plover, Piping Rail, King Shrike, Loggerhead (Eastern population) Sparrow, Henslow's Thrasher, Sage Warbler, Kirtland's Warbler, Prothonotary	Dace, Nooksack Sucker, Salish Trout, Aurora Whitefish, Acadian		Snake, Blue Racer Snake, Lake Erie Water Turtle, Leatherback	Butterfly, Maritime Ringlet (1977)	Agalinis, Gatterer's Agalinis, Skinner's Avens, Eastern Balsamroot, Deltoid Mountain Braya, Long's Buttercup, Water-plantain Cactus, Eastern Prickly Pear Clover, Slender Bush Coreopsis, Pink Fern, Southern Maidenhair Gentian, White Prairie Lady's-slipper, Small White Lichen, Seaside Centipede Lotus, Seaside Bird's-foot Lousewort, Furbish's Lupine, Prairie Milkwort, Pink Mouse-ear-cress, Slender Mint, Hoary Mountain Orchid, Western Prairie White Fringed Plantain, Heart-leaved Pogonia, Large Whorled Pogonia, Small Whorled Poppy, Wood Quillwort, Engelmann's Sundew, Thread-leaved Tree, Cucumber Trillium, Drooping Water-pennywort

## 2.11 Species Extinct or at Risk, 1997 (concluded)

	Mammals, land and sea	Birds	Fish	Molluscs	Reptiles and amphibians	Lepidoptera	Plants, mosses and lichens
Threatened <sup>4</sup>	Bison, Wood Caribou, Peary (Low Arctic population) Caribou, Woodland (Gaspé population) Otter, Sea Porpoise, Harbour (Northwest Atlantic population) Shrew, Pacific Water Townsend's Mole Whale, Beluga (Eastern Hudson Bay population) Whale, Humpback (North Pacific population)	Chat, Yellow-breasted (B.C. population) Grouse, Sage (Prairie population) Murrelet, Marbled Shrike, Loggerhead (Prairie population) Sparrow, Baird's Tern, Roseate Warbler, Hooded Woodpecker, White-headed	Cisco, Blackfin Cisco, Shortjaw Cisco, Shortnose Darter, Channel Darter, Eastern Sand Madtom, Margined Redhorse, Black Redhorse, Copper Sculpin, Great Lakes Deepwater Sculpin, Shorthead Stickleback, Enos Lake Whitefish, Lake Simcoe	Snail, Banff Springs	Rattlesnake, Eastern Massasauga Turtle, Blanding's (Nova Scotia population) Turtle, Spiny Softshell		Ash, Blue Aster, Anticosti Aster, White Wood Aster, White-top Bluehearts Braya, Fernald's Chestnut, American Colicroot Deerberry Fern, Mosquito Flag, Western Blue Gentian, Plymouth Ginseng, American Goat's-rue Golden Crest Golden Seal Greenbrier, Carolinean Helleborine, Giant Jacob's Ladder, van Brunt's Moss, Apple Lipocarpha, Small-flowered Mulberry, Red Paintbrush, Golden Pepperbush, Sweet Pogonia, Nodding Redroot Sedge, False Hop Spiderwort, Western Thistle, Pitcher's Thrift, Athabasca Coffee-tree, Kentucky Coffee Twayblade, Purple Verbena, Sand Violet, Bird's-foot Violet, Yellow Montane Water-willow, American Willow, Tyrrell's Woodsia, Blunt-lobed

1. Any species that no longer exists.

2. Any species no longer existing in the wild in Canada, but occurring elsewhere.

3. Any species facing imminent extirpation or extinction.

4. Any species likely to become endangered if limiting factors are not reversed.

Source: Environment Canada, List of species at risk in Canada as designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), 1997.





SECTION

## **The People**

*The Population*

*Health*

*Education*

*Household and Family Life*

*The Labour Force*

*Arts and Leisure*

2





## *The Population*

### C h a p t e r

### Three

*“Every great empire has an emblem,” Henri Joly said in 1865 during the debates about Confederation. So he proposed adopting the rainbow: “By the endless variety of its tints the rainbow will give an excellent idea of the diversity of races, religions, sentiments and interests of the different parts of Confederation.”*

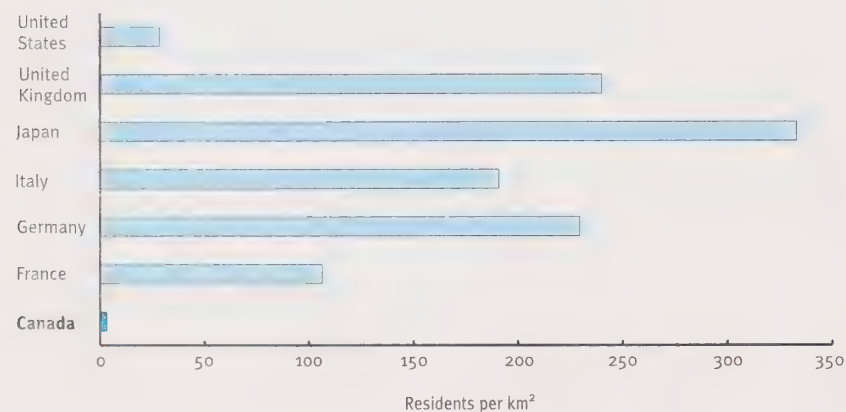
*In the end, the Fathers of Confederation couldn’t agree on a national emblem, but Joly was*

right when he went on to say that “by its slender and elongated form, the rainbow would afford a perfect representation of the geographical configuration of Confederation.”

Despite our enormous spaces, right from the beginning of Canada's history, most settlers have chosen residence in a narrow southern band of land roughly parallel to our border with the United States. More than 130 years later, we still live mainly here in a strip of urban areas from Québec on the St. Lawrence River to Sault Ste. Marie on the shores of Lake Superior: about 60% of us clustered along a belt that makes up only 2.2% of our land.

Paradoxically, it is the vast size of our land that defines the small size of our population. On July 1, 1997, we numbered 30,286,600. With 9,180,000 square kilometres in which to roam, this gives us one of the lowest population densities on the planet.

Population densities, Group of Seven countries



Source: *Labour Force Statistics, 1975–1995*, Organisation for Economic Co-operation and Development.

Take Macau for example, the Portuguese colony on China's coast. With 23,194 people for every square kilometre, it is by far and away the planet's most crowded spot. In Mexico, there are 48 people for every square kilometre. Here in Canada, there are just three. Neither the Yukon Territory nor the Northwest Territories has a population larger than that of a small city, although these areas together cover 40% of Canada's land mass.

## BIRDS OF PASSAGE

As with a slowly tilting table, Canada's population is gradually shifting from east to west. Canadians are, in fact, inveterate movers. It's fitting that it was the Canadian writer, Thomas Chandler Haliburton, who coined the phrase “bird of passage”—here today and gone tomorrow. Nearly half of Canada's population moved at least once, between 1986 and 1991.

This is not a particularly recent phenomenon. Canadians have always been a people on the move. Largely, our migrations have depended on the economic and political forces of the day. In the very early 1800s, as Europe was building its huge merchant navies, which required lumber, the axis of activity was in the woodlands of Ontario and the Maritimes. As Europe manifested its hunger for wheat, the centre of gravity shifted to the Prairies, which became known as Canada's “breadbasket.”

Today's booming western economy, largely fuelled by new trade connections with the Asian countries, has made British Columbia the prime destination in Canada. From 1951 to 1996, B.C. and Alberta increased their combined share of Canada's population from 15% to 22%.

At the same time, the Atlantic provinces' share of the population is dropping: in 1996, this region accounted for only 8% of Canada's population. (In 1951, it was 12%.) Quebec is another eastern province whose proportion has dropped: from 29% to 25%. Ontario is still our most populous province; in 1996, it was home to 37% of the population.

Nonetheless, since 1991, every province and territory, with the exception of Newfoundland, has recorded some kind of population increase. In fact, Newfoundland had nearly 17,000 fewer inhabitants in 1996 than it did in 1991. British Columbia, on the other hand, was the star attraction; since 1991, its population has grown by just under half a million.

This coastal province of ours, often viewed as the “south” of Canada, is the only province that has grown faster than the national average in every census since Confederation. British Columbia owes roughly 45% of this growth to immigration, 35% to movement between provinces and just 20% to natural growth.

In the Northwest Territories and the Yukon Territory, growth rates are also high, second only to those of British Columbia, but the mix here is one of high fertility and declining mortality rates, rather than migration patterns.

Names are certainly no indication of population growth. Imagine the irony if they were. Tiny Township in Ontario, for instance, grew nearly 6% from 1991 to 1996, while both Biggar and Plenty in Saskatchewan lost people in the same period.

Rankings of large urban areas, or census metropolitan areas as they are called, have remained the same since 1991. Toronto leads, followed by Montréal, Vancouver, Ottawa–Hull, Edmonton and Calgary.

In 1996, Québec overtook Winnipeg for the seventh-place size ranking and the census metropolitan area of Toronto reached a population of 4 million. To place that lofty-sounding number in perspective, it is barely one-fifth the size of the population of Shanghai.

In keeping with our “bird-of-passage”-like characteristics, the proportion of us who move during the period between two census counts has not changed since 1961: it’s roughly 45%. In 1995 alone, about 1.2 million Canadians moved between provinces. More people, proportionally speaking, left Newfoundland than any other province. More specifically, from 1986 to 1991, about 4% of us left one province for another, 16% left

one municipality for another within the same province, and 23% moved within the same municipality.

Ontario welcomed more new residents in 1995 than any other province, the majority of whom came from outside the country. Canadians from other provinces, however, mostly moved to British Columbia, adding to the shift in Canada’s centre of gravity from east to west.

## BIRTH TO DEATH

It’s the demographic equivalent of the teeter-totter and may well change the way our social and urban landscape looks in the coming generations. On the one side, we are aging. On the other, we are having fewer babies. Very likely, this may mean that we will see fewer children’s stores and schools will close down. But as well, more homes for seniors will surely



Photo by Brett Louthier

At the Sikh temple, Victoria.



spring up, as will funeral homes and travel agencies catering to retirees.

On the face of it, the thousand or so babies born every day in Canada in 1995 may seem like a fairly healthy number—that means 12.7 babies born for every 1,000 people. In fact, this birthrate is our all-time low. Not only that, but it has been dropping steadily for the last 50 years. Our rapidly aging population, on the other hand, continues to boost the death rate. In 1995–96, almost 216,000 Canadians died, or about 590 a day.

These trends are similar to those in Europe, particularly western Europe, where the current low birth rate is generally due to low fertility and to an older population. Between 1990 and 1994, for example, the populations of 13 European nations dropped.

Meanwhile, of the 378,000 babies born in Canada in 1995, about 194,000 were boys and 184,000 girls. This gave us a ratio of 105 boys to every 100 girls, but it's interesting to note that because of differences in mortality, there are more women than men in Canada. Generally, this is the case in most developed countries. The exceptions are Turkey and Iceland, where there are more men than women.

## Fertility

Fertility has been declining in Europe and North America for the past 40 years. Within Canada, the total fertility rate—the average number of live births per woman—fell very slightly from 1990 to 1995: from 1.71 children per woman to 1.64. The latter compares with a higher rate in the United States (2.0) and a lower rate in the European Economic Community (1.43).

It has been calculated that to ensure the renewal of generations, theoretically, every woman in Canada would have to have 2.1 children. All provinces report figures below this “replacement level.” Quebec's recent place as the province with the lowest fertility rate has now been taken by Newfoundland, whose rate of 1.25 children per woman in 1995 was the lowest level ever reported by any province.

Fewer women are having three or more children, and more women have been delaying their first child. The average age of women giving birth has also risen: from 26 in 1975 to 28.8 in 1995. Women over 30 accounted for only about 19% of first-time mothers giving birth in 1975, but nearly 43% in 1995.

In Canada, infant mortality is not at issue in terms of population growth. However, in 1995, the rate fell slightly, to 6.1 infant deaths per 1,000 births, from 6.3 in 1994. Except for Manitoba and Saskatchewan, all provinces experienced drops in the rate. By comparison, Europe has made notable progress in reducing infant mortality: rates have dropped by 25% or more in the past five years. In 1989, Canada had the lowest rate in the world. Now Greece and Italy are the only European countries with a rate higher than that of Canada.

## Aging Canadians

At the same time as the fertility rate is declining, Canada's population continues to grow older. In 1951, people who were 65 years of age and up represented about 8% of the total population, or slightly more than a million Canadians. In 1996, there were 3.5 million seniors, or more than 12% of the population. By 2031, the proportion of seniors is expected to be more than 20%.

There are several reasons why the proportion of older Canadians is increasing. Since birth rates are declining, this means there are fewer young people. Life expectancy after age 65 is also increasing. It is estimated that in 2016, life expectancy will be 78.5 years for men and 84 years for women. In 1996, more than three-quarters of a million Canadians were over the age of 80, twice the level of 25 years before. About two-thirds of these were women.

Certain areas in Canada have older populations. Five regions in particular, unequal in size and population, have aged considerably: a large

area involving part of both Manitoba and Saskatchewan (where more than 17% of the population is over 65), the Okanagan Valley in British Columbia, the Victoria–Vancouver region, a ring of townships surrounding Toronto, and a block of counties in southwest Nova Scotia. Saskatchewan has more seniors proportionally than any other province, and the territories the least. The urban centres with the largest proportion of seniors are the Victoria and the St. Catharines–Niagara census metropolitan areas.

It's important to note that the presence of the elderly in any given area makes it attractive to other seniors. There's a great draw, for example, to areas such as Victoria, Vancouver, the Okanagan Valley and St. Catharines–Niagara. Largely, the attraction is the climate, but available housing and services and proximity to the amenities of city living are also key.

Certain areas may also “grow older” because of an exodus of the young. In Saskatchewan, for example, the high proportion of older residents may be the result of the departure of younger people rather than an influx of seniors. It is thought that Winnipeg and, to a lesser extent, Thunder Bay have seen an in-migration of older people who have been unable to find appropriate housing and services in the hinterlands of these cities.

An aging population has another important consequence: an increase in the number of people with disabilities. In 1993, about 7% of the working-age population (those aged 15 to 64) had work disabilities—some 1.4 million Canadians. The likelihood of having such a limitation was about 13% for those aged 15 to 19 and 39% for those aged 65 or over.

## IMMIGRATION

The turning point in Canada's immigration policy was the adoption of the Canadian Bill of Rights in 1960. For the first time in Canada's history, a federal statute barred discrimination on the grounds of race, national origin, colour, religion or sex, and specified the fundamental freedoms of Canadians. Major changes to federal immigration regulations in 1962



Bankend, Saskatchewan.

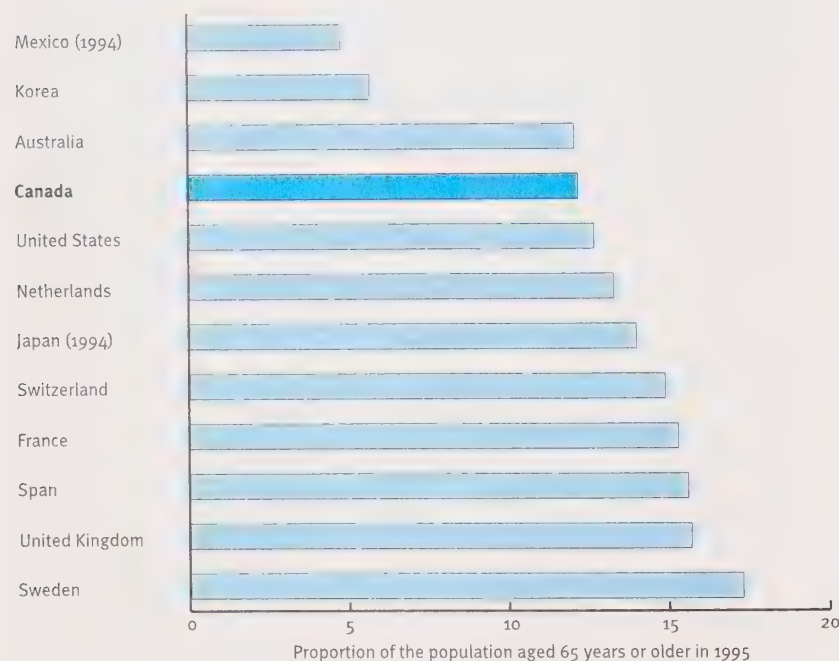
Photo by William DeKor



resulted in a shift in the source of immigrants to Canada: a reduction in the number of Canadians who reported only British or French origins, and a large increase in the number of visible minority groups, especially people of Asiatic origin.

Between 1945 and 1966, when Canada's population reached 20 million, average annual immigration was about 125,000. Immigration generally remained at that level through the 1970s and most of the 1980s. Only

#### More than 1 in 10 Canadians is 65 or older



Source: *Labour Force Statistics, 1975-1995*, Organisation for Economic Co-operation and Development.

since 1990 has it been more than 200,000 annually. The nearly 256,000 immigrants in 1993 formed the second highest group of newcomers since 1913, although the number is nowhere near the 400,000 of that year.

Members of more than 100 different ethnic groups live in Canada. People with British or French backgrounds are the largest ethnic groups in Canada, but neither group alone represents a majority of the population. At the time of Confederation in 1867, approximately 90% of Canada's population was either British (60%) or French (30%). By 1981, the combined proportion had dropped to 67%. In 1991, it dropped even further: 55% of Canadians reported that their origins were solely British or French, or a mixture of British and French. The trend continued in 1996, when 17% of Canadians reported British-only ancestry and 9% were French-only.

In 1996, immigrants made up 17.4% of Canada's population. This is not especially exceptional, however. For decades, immigrants have made up about 16% of the population. What is key, though, is that Canada's population growth is due largely to immigration. By setting immigration targets, the federal government is actually ensuring our continued population growth. With our birth rate at such an all-time low, our projected population level of 37 million by the year 2016 would be much lower without growth from immigration.

In 1995, about 212,000 newcomers were consequently welcomed to Canada. About 50% were economic immigrants: people selected for special skills or money to invest, or to fill specific kinds of jobs. Another 77,000 were closely related to Canadians living here and 28,400 were refugees. The main sources of immigrants were Hong Kong, China, India, and the Philippines, with 15,000 people emigrating from each. More than half of all immigrants in 1996 settled in Ontario, 21% in British Columbia and 15% in Quebec.

Most immigrants are young adults, and settle in urban areas. In 1991, immigrants were more likely to have higher levels of education and to be married than their Canadian-born counterparts. The proportion with a



mother tongue other than English or French grew from 11% in 1986 to nearly 17% in 1996.

Immigration has strongly affected the size of visible minority groups in Canada. From the Aboriginal peoples' point of view, immigrant Europeans were the first visible minorities. The first Black slaves were brought to New France in 1608 (slavery was practised in Canada both before and after European settlement, until 1834).

In 1996, about 3.2 million Canadians were members of visible minority groups: that's 11% of the population. Ontario accounted for more than half, followed by British Columbia (21%) and Quebec (14%). Current projections suggest that the visible minority population will increase to around 7 million by 2016, or about 19% of the projected total population. The largest visible minority groups in 1996 were Chinese, South Asians and Blacks.

## FIRST NATIONS

Long before the arrival of the settlers, Aboriginal people lived on the British Columbia coast and the eastern woodlands of the Great Lakes, St. Lawrence River and Atlantic coast. The exceptions were the Inuit and their predecessors, whose skills at surviving in the treeless Arctic continue to astonish southern dwellers.

Many of these people believe this land to be the land of their origin. From the work of historian Olive Dickason, among others, we can derive a sense of how the myths of the Aboriginals confirm their attachment to the land. Notes Dickason: "The Gitksan of northern British Columbia maintain that the Upper Skeena River valley is their Garden of Eden; several groups, such as the Salish Thompson River people and the Ojibwa, believe that their first ancestors were born of the earth; the Athapaskan Beaver hold that humans crawled through a hollow log in order to reach the earth, an obvious birth analogy; the Iroquoians (including the Huron), that the



Photo by Brett Lawther

Summer at Dallas Road, one of Victoria's favourite oceanside hangouts.

## *C e n t e n a r i a n s*

*From Hippocrates to Khrushchev, who told the New York Times Magazine in 1958, “Life is short; live it up,” and many a poet in between, humanity has bemoaned the brevity of existence.*

*For those born a century ago, there was one chance in three of reaching a 65th birthday and only one in 5,000 could have hoped to live for a century. Today, centenarians are the fastest growing group among the elderly. Although there were only 3,700 people in Canada aged 100 or over in 1991, this number is triple that of 1971, and may double by 2011. By 2031, there could be as many as 25,000 centenarians in Canada!*

*Seniors (those aged 65 and over) make up one of the fastest growing groups in Canadian society. By 2021, seniors are expected to represent 18% of the Canadian population.*

mother of mankind Aataentsic, fell through a hole in the sky and landed on a tortoise with earth piled on its back.”

Not only are Canada’s First Nations rich in culture, they are also linguistically very diverse. The Aboriginal peoples who occupied what is now Canada when the first Europeans arrived spoke more than 50 Indian and Inuit languages and dialects.

In answer to the 1996 Census question on Aboriginal origins, some 800,000 people reported that they were North American Indian, Métis or Inuit. That was about 3% of Canada’s population. About 70% of this group are North American Indian, another 25% Métis and about 1 in 20 Inuit. Some individuals consider themselves as members of more than one group.

The largest of the 48 First Nations counted in 1991 was Cree, with nearly 120,000 members; the smallest was the Potawatomi (“Those-who-make-or-keep-a-fire”) of the Great Lakes area, with 85. The Northwest Territories is the area of Canada where Aboriginal people represent a majority (62%) of the population.

The new Territory of Nunavut (“Our Land” in Inuktitut) is being divided from the Northwest Territories in 1999, and will be governed by a predominantly Inuit legislative assembly. In 1996, more than four out of five Aboriginal people lived west of Quebec: the highest concentrations were in the North and on the Prairies. Ontario had more North American Indians than any other province. Alberta had the largest Métis population, while the Northwest Territories had the largest Inuit population. More than a quarter of all the Aboriginal people in Canada lived in census metropolitan areas: Winnipeg, for example, had more Aboriginal people than the entire Northwest Territories.

## Aboriginal Traits

It would be difficult to be more uniquely Canadian than the very small groups of people who speak these three Aboriginal languages: the Haida (100 speakers in 1991), the Kutenai (155 speakers) and the Tlingit (90 speakers). Called “isolates,” the languages of these speakers are completely unrelated to any other tongue on earth. In 1996, about 234,000 Canadians spoke an Aboriginal language. Just over 76,000 were fluent in Cree, but at the other end of the scale, there were only 40 people who spoke Hare. In 1996, some 207,000 Canadians, or just over one-quarter of the Aboriginal population, spoke an Aboriginal language as their mother tongue (meaning, the first language they learned and still understand).

More and more, it is the young who are learning Aboriginal languages, perhaps in the spirit of the Gitksan saying “walk on, walk on, on the breath of our grandfathers.” In 1991, among Aboriginal children aged 5 to 14, some 25% were taught in an Aboriginal language, far more than in their parents’ time.

Aboriginal peoples no longer fish and barter for food as in times gone by. In 1991, only 14% of Aboriginal people carried out these activities to support themselves and their families. This group of people does not move more frequently than other Canadians. In 1991, 15% of Aboriginal adults had recently moved, compared with 16% of the total population.

## MULTILINGUAL CANADA

There are two official languages in Canada: English and French. In Quebec, the provincial government maintains an *Office de la langue française* which enforces the *Charte de la langue française*. The Charter makes French the official language of the province, and the normal language of the workplace, communications and business. Only one province, New Brunswick, is officially bilingual.

*Every five years, Canadians can add another year to their life expectancy. Not surprisingly, given that the life span of a woman is seven years longer than that of a man, 79 of every 100 centenarians are women.*

*Until recently, a Canadian woman living in Ontario was reported to be the world's oldest person. Mary Louise Meilleur turned 117 years old on August 29, 1997, but passed away on April 16, 1998. A year earlier, Jeanne Calment of France died at the age of 122.*

*Shakespeare once wrote, “I love long life better than figs.” Calment, on the other hand, thought God had forgotten her.*





*Canadian National. X-32168*

**Dutch immigrants, leaving Pier 21 in Halifax, ca.1950.**

## *A Pier Review*

*"I arrived at Pier 21 in the late summer of 1940, a frightened 10-year-old, escaping with my family from the Nazi occupations of Austria and Czechoslovakia. We arrived aboard a small converted cruise ship that sailed from Liverpool in a convoy. German U-boats attacked twice on the way across the Atlantic.*

*"I remember the moment I first sighted Nova Scotia from the ship's bow, surprised that the trees were green and the soil brown, as the few newsreels I had seen of Canada were black and white.*

*"On the pier, an avuncular immigration inspector waved us into the pier's annex where we were welcomed by volunteers from the Jewish Immigrant Aid Society. I was*

*handed a Fig Newton. Nothing has tasted better since." (Peter C. Newman)*

*Before it closed in 1971, some 1.5 million immigrants came to Canada through Halifax Harbour's Pier 21, including the now-famous author Peter C. Newman.*

*The Canadian equivalent of America's Ellis Island, Pier 21 was, in actual fact, a sprawl of low-lying sheds clustered along the Halifax waterfront. When it opened in 1928, it contained several government offices (Immigration Services, Customs, Health and Welfare, Agriculture), the Red Cross, a waiting room, eating areas, a nursery, a hospital, a detention centre, a kitchen, dormitories and a promenade overlooking the harbour. In 1944, a fire*

*destroyed the immigration quarters; three years later, they had been rebuilt and Immigration Services returned to full operation.*

*The late 1940s and early 1950s were peak years for Pier 21. In those days, it covered an area nearly four times the size of a football field. In just one day in the mid-1950s, some 3,800 passengers were welcomed from five large passenger ships, including the Queen Elizabeth.*

*For newcomers arriving at the pier, it must have seemed a daunting place, with its barred windows and large wire cages. Everyone was tagged for identification and waited in halls of exposed steel, arched brick and clerestorey windows. Some were*

*detained in the dormitories. The few who were refused entry left on the next ship. But most walked down a “pedway” into an annex where they were welcomed by volunteers and eventually boarded trains bound for various parts of Canada.*

*During the Second World War, Pier 21 was the secret departure point for troops destined for war zones abroad. Between 1939 and 1945, some 368,000 soldiers left Canada from Pier 21. Many returned years later to cheering crowds. Nearly 3,000 children, evacuated from Britain in 1940 and 1941, came to Canada through Pier 21. So did another 48,000 “war brides” and their 22,000 children after the war.*

*Eventually, more than 100,000 refugees and displaced persons arrived at this national doorstep, some in small wooden boats from the war-torn countries of Europe and the Baltic states, some with only the clothes on their backs.*

*Today, most newcomers land in Canada after a long flight from Hong Kong, the People’s Republic of China, India or the Philippines. Between 1991 and 1996, more than half the immigrants who arrived in Canada were Asian-born. Of those who came here before 1961, nine out of every 10 were from Europe.*

*In 1988, a not-for-profit organization called the Pier 21 Society was established to*

*pay tribute to those who came through Canada’s eastern gateway, and to revitalize what’s left of the rickety immigration building, a shed which now stands empty on the windy Halifax waterfront.*

*In 1995, John LeBlanc, founding president of the Pier 21 Society, wrote Ode to Pier 21, which poignantly captures this important moment in Canada’s immigration history. Here is an excerpt:*

*Still I am the platform that processed  
Kings, queens, princes and paupers,  
The detainees, inadmissibles,  
Lost souls, the penniless, the threadbare.  
Military forces off to war, the  
shipwrecked,  
Refugees from tyranny, oppression and  
revolution,  
Seeking land, hope, harmony, liberty,  
I greeted them all.*





Inuit woman from Repulse Bay, Northwest Territories.

### *Improvised Song of Joy*

Ajaja—aja—jaja,  
The lands around my dwelling  
Are more beautiful  
From the day  
When it is given me to see  
Faces I have never seen before.  
All is more beautiful,  
All is more beautiful,  
And life is thankfulness.  
These guests of mine  
Make my house grand,  
Ajaja—aja—jaja.

— Igloodik Inuit song

Despite decades of encouragement in school and out, in 1996, only about 17% of Canadians could conduct a conversation in both official languages, compared with 12% some 45 years earlier. Nevertheless, the actual number of people identifying themselves as bilingual speakers almost tripled during the period, from 1.7 to 4.8 million. In 1996, English was the only official language spoken by 67% of the population, and French was the only official language spoken by 14%.

In 1996, about 84% of Canadians could speak English. For some 60% of these, English was the mother tongue. About 31% of Canadians could conduct a conversation in French and for less than 24%, French was the mother tongue.

Nationally, the proportion of Canadians able to speak French has been constant from 1951 to 1991, while for those able to speak English, it is up slightly. In Quebec, however, where English-speakers once made up 14% of the population, they now make up only 9%.

Canadians with neither English nor French as mother tongue represent nearly 17% of the population, an increase from 12% in 1951. In fact, in 1996, more than 470,000 people were unable to speak either of Canada's two official languages. Most of these lived in urban areas in Ontario, British Columbia, Quebec and Alberta, popular destinations for many recent immigrants.

The top three non-official languages spoken at home changed markedly from 1971 to 1996: from Italian, German and Ukrainian to Chinese, Italian and Punjabi. In 1996, linguistic diversity was greatest in Canada's largest urban areas. Over half of those who reported non-official languages as their home language lived in Toronto, Vancouver or Montréal. They accounted for 25% of Toronto residents, 22% of Vancouverites and 12% of Montréalers.

## SPIRITUAL CANADA

Canada has been described as an act of belief as much as a nation. The 1982 Canadian Charter of Rights and Freedoms asserts that the nation is founded on principles that recognize the supremacy of God. Religious belief can also be an important part of our personal identities. Although the number of people reporting "no religion" almost doubled from 1981 to 1991, nearly 88% of Canadians still reported some kind of religious belief. In 1992, about one-quarter of Canadians aged 15 years and over reported that they attended religious services at least once a week. Almost one-third said that they attended at least once a month, and over 60% attended at least once during the previous year. Women were more likely to attend religious services than men.

In 1991, Roman Catholics were still the largest religious group in Canada, drawing the faith of 12.2 million, or 45% of the population. The proportion of Protestants, the second largest group, went down from 56% of the population in 1921 to 44% in 1971 and down again in 1991 to 36%, or 9.8 million Canadians. The smallest religious group counted by Statistics Canada in 1991 was the Kabalarians, with 115 adherents.

Much of the shift in Canada's religious make-up comes from recent immigration. The largest increase between 1981 and 1991 occurred in the eastern non-Christian religions, which claimed about three-quarters of a million members. The increases were particularly high among the Buddhist, Islam, Hindu and Sikh groups. In the same period, Judaism, with 318,000 members, and Eastern Orthodoxy, with nearly 390,000, both rose by 7%. Fewer than 30,000 Canadians described themselves as belonging to para-religious groups, sects and cults in 1991.

## S O U R C E S

Statistics Canada

United Nations

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Social Trends.** Quarterly. 11-008-XPE
- **Report on the Demographic Situation in Canada.** Annual. 91-209E
- **Projections of Visible Minority Population Groups, Canada, Provinces and Regions, 1991-2016.** 91-541-XPE
- **Projections of Population with Aboriginal Ancestry, Canada, Provinces, Regions and Territories, 1991-2016.** 91-539-XPE
- **Religions in Canada: The Nation.** 91 Census. 1993. 93-319
- **A National Overview: Population and Dwelling Counts.** Census. 93-357-XPB
- **Profile of Canada's Aboriginal Population: Aboriginal Data.** 91 Census. 1995. 94-325
- **Families in Canada.** Focus on Canada series. 96-307E
- **Canadians on the Move.** Focus on Canada series. 96-309E
- **Languages in Canada.** Focus on Canada series. 96-313E
- **Growing Old in Canada: Demographic and Geographic Perspectives.** Census Monograph Series. 1997. 96-321-MPE

Selected publications from other sources

- **Trends in Europe and North America 1996/97: The Statistical Yearbook of the Economic Commission for Europe.** United Nations. 1997
- **Royal Commission on Aboriginal Peoples report.** 1996



## The Population

### Legend

- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 3.1 International Population Comparisons, 1995

	Area	Population		Total increase	Births	Deaths	Natural increase	Net migration	Population distribution by age		
		thousands	Residents per km <sup>2</sup>						0-14	15-64	65+
	km <sup>2</sup> (thousands)						Rate per 1,000			%	
<b>Canada</b>	<b>9,970.6</b>	<b>29,615</b>	<b>3.0</b>	<b>13.4</b>	<b>12.8</b>	<b>7.1</b>	<b>5.6</b>	<b>7.8</b>	<b>20.0</b>	<b>67.8</b>	<b>12.2</b>
Australia	7,686.8	18,049	2.3	14.2	14.1	6.9	7.1	6.0	21.4	66.6	11.9
Austria	83.9	8,047	95.9	..	..	..	..	..	..	..	..
Belgium	30.5	10,137	332.4	..	..	..	..	..	..	..	..
Denmark	43.1	5,228	121.3	6.9	13.4	12.0	1.3	5.5	17.3	67.4	15.3
Finland	338.0	5,108	15.1	3.5	12.3	9.6	2.7	0.6	19.0	66.8	14.2
France	549.0	58,143	105.9	4.2	12.5	9.1	3.4	0.8	19.5	65.4	15.1
Germany	356.9	81,661	228.8	3.4	9.4	10.8	-1.5	4.9	15.9	68.2	15.8
Greece	132.0	10,454	79.2	2.1	9.7	9.6	0.1	2.0	16.8	67.6	15.6
Iceland	103.0	267	2.6	7.5	17.2	6.0	11.2	-2.6	24.4	64.3	11.3
Ireland	70.3	3,598	51.2	..	..	..	..	..	24.5	64.0	11.5
Italy <sup>1</sup>	301.2	57,283	190.2	..	..	..	..	..	..	..	..
Japan	377.8	125,570	332.4	5.2	9.5	7.4	2.1	-0.4	15.9	69.4	14.5
Luxembourg	2.6	413	158.8	15.1	13.2	9.3	3.9	11.2	18.5	67.4	14.1
Netherlands	40.8	15,459	378.9	4.6	12.3	8.8	3.5	2.1	18.4	68.4	13.2
New Zealand	268.7	3,580	13.3	18.3	16.1	7.8	8.3	5.5	23.2	65.1	11.7
Norway	324.2	4,348	13.4	5.0	13.8	10.3	3.4	1.6	19.4	64.6	16.0
Portugal	92.4	9,918	107.3	1.8	10.8	10.5	0.3	1.4	17.8	67.6	14.6
Spain <sup>2</sup>	504.8	39,210	77.7	1.7	9.2	8.7	0.4	1.2	16.6	68.1	15.3
Sweden	450.0	8,847	19.7	7.0	11.6	10.6	1.0	6.0	18.7	63.8	17.5
Switzerland	41.3	7,062	171.0	6.1	11.6	8.9	2.7	3.6	18.8	67.6	14.8
Turkey	780.6	61,646	79.0	17.4	22.4	6.6	15.8	1.6	32.3	63.0	4.7
United Kingdom	244.8	58,606	239.4	3.4	12.5	11.0	1.5	1.8	19.4	64.9	15.7
United States	9,372.6	263,168	28.1	9.3	14.8	8.8	6.0	3.3	21.8	65.4	12.7

1. Data refer to the labour sample surveys conducted by the Italian Statistical Institute.

2. Includes Ceuta and Melilla.

Source: Organisation for Economic Co-operation and Development. *Labour Force Statistics, 1976-1996*, Paris, 1997 Edition.

3.2 Population,<sup>1</sup> 1977 to 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	thousands												
1977	23,796.4	566.6	120.2	841.2	697.8	6,455.1	8,525.6	1,040.0	947.0	1,953.6	2,581.2	23.0	45.0
1978	24,036.3	568.6	121.9	846.1	701.6	6,463.4	8,613.3	1,043.3	954.2	2,028.7	2,625.8	23.9	45.6
1979	24,276.9	571.0	123.2	850.9	705.2	6,488.8	8,685.9	1,039.4	961.8	2,105.4	2,675.0	24.1	46.1
1980	24,593.3	574.2	124.0	854.6	708.1	6,528.2	8,770.1	1,036.7	969.7	2,201.2	2,755.5	24.5	46.7
1981	24,900.0	576.5	124.0	856.4	708.4	6,568.0	8,837.8	1,038.5	978.2	2,303.8	2,836.5	24.1	47.9
1982	25,201.9	576.3	124.2	862.0	710.4	6,600.6	8,951.4	1,048.9	989.9	2,377.5	2,886.3	24.7	50.0
1983	25,456.3	581.2	125.8	871.4	717.6	6,624.7	9,073.4	1,063.2	1,004.7	2,399.3	2,919.6	23.8	51.5
1984	25,701.8	581.8	127.0	879.6	723.4	6,654.7	9,206.2	1,074.1	1,018.6	2,398.6	2,960.6	24.1	53.1
1985	25,941.6	580.9	128.1	887.7	726.1	6,690.3	9,334.4	1,084.6	1,028.8	2,411.1	2,990.0	24.6	55.0
1986	26,203.8	578.1	128.8	892.1	727.7	6,733.8	9,477.2	1,094.0	1,032.9	2,438.7	3,020.4	24.8	55.4
1987	26,549.7	576.5	129.0	896.3	730.5	6,805.9	9,684.9	1,100.5	1,036.4	2,443.5	3,064.6	26.0	55.7
1988	26,894.8	576.2	129.7	900.2	733.1	6,860.4	9,884.4	1,104.7	1,031.7	2,463.0	3,128.2	26.9	56.3
1989	27,379.3	577.4	130.6	906.7	738.0	6,948.0	10,151.0	1,106.2	1,023.0	2,504.3	3,209.2	27.4	57.5
1990	27,790.6	578.9	131.0	912.5	743.0	7,020.7	10,341.4	1,108.4	1,010.8	2,556.4	3,300.1	28.0	59.4
1991	28,120.1	580.3	130.8	917.9	748.5	7,080.6	10,471.5	1,112.5	1,006.3	2,601.3	3,379.8	29.1	61.3
1992	28,542.2	583.6	131.4	924.7	753.1	7,160.6	10,646.8	1,117.3	1,007.7	2,647.4	3,476.6	30.4	62.6
1993	28,946.8	584.5	132.9	930.9	755.5	7,238.3	10,814.1	1,123.7	1,010.2	2,686.9	3,575.6	30.6	63.6
1994	29,255.6	581.8	134.3	934.7	757.7	7,287.8	10,936.5	1,128.6	1,011.3	2,717.2	3,671.1	29.8	64.9
1995	29,617.4	577.5	135.4	938.5	759.9	7,341.3	11,098.1	1,135.6	1,015.2	2,753.3	3,766.2	30.5	66.1
1996	29,969.2	571.7	136.7	943.2	762.0	7,388.0	11,258.4	1,140.4	1,019.6	2,793.3	3,857.6	31.4	66.8
1997	30,286.6	563.6	137.2	947.9	762.0	7,419.9	11,407.7	1,145.2	1,023.5	2,847.0	3,933.3	31.6	67.5
	Average annual growth rate (%)												
1977-1997	1.21	-0.03	0.67	0.60	0.44	0.70	1.47	0.48	0.39	1.90	2.13	1.61	2.05
1987-1997	1.33	-0.23	0.62	0.56	0.42	0.87	1.65	0.40	-0.13	1.54	2.53	1.99	1.95
1992-1997	1.19	-0.69	0.87	0.50	0.24	0.71	1.39	0.50	0.31	1.46	2.50	0.82	1.53

1. On July 1 of each year.

Source: Statistics Canada, CANSIM, matrices 6367 to 6379.

## 3.3 Components of Population Growth

	July 1, 1992	July 1, 1992 – June 30, 1993							July 1, 1993
	Population	Births	Deaths	Immigration	Emigration	Net inter-provincial migration	Returning Canadians	Net non-permanent residents	Population
<b>1992-93</b>									
<b>Canada</b>	<b>28,542,213</b>	<b>392,180</b>	<b>201,808</b>	<b>265,405</b>	<b>43,993</b>	<b>—</b>	<b>22,268</b>	<b>-70,808</b>	<b>28,946,768</b>
Newfoundland	583,551	6,689	3,815	802	258	-3,078	139	1,250	584,450
Prince Edward Island	131,448	1,820	1,122	163	67	654	36	-9	132,937
Nova Scotia	924,737	11,631	7,560	2,602	784	96	356	-299	930,894
New Brunswick	753,135	9,333	5,802	742	914	-1,402	442	-251	755,543
Quebec	7,160,562	93,750	50,648	48,261	5,930	-8,420	3,080	-8,620	7,238,250
Ontario	10,646,801	148,738	74,638	144,962	18,635	-14,189	9,597	-54,228	10,814,072
Manitoba	1,117,296	16,522	9,247	5,405	2,195	-5,544	1,042	-467	1,123,709
Saskatchewan	1,007,742	14,631	8,013	2,561	947	-6,348	461	-324	1,010,166
Alberta	2,647,365	40,992	14,938	18,920	7,379	-1,181	3,723	-3,709	2,686,895
British Columbia	3,476,610	45,959	25,629	40,706	6,740	40,099	3,324	-4,063	3,575,619
Yukon Territory	30,362	546	125	127	64	-265	32	-23	30,641
Northwest Territories	62,604	1,569	271	154	80	-422	36	-65	63,592
<b>1996-97</b>									
	July 1, 1996	July 1, 1996 – June 30, 1997							July 1, 1997
	Population	Births	Deaths	Immigration	Emigration	Net inter-provincial migration	Returning Canadians	Net non-permanent residents	Population
<b>Canada</b>	<b>29,969,209</b>	<b>364,765</b>	<b>216,491</b>	<b>223,238</b>	<b>49,633</b>	<b>—</b>	<b>22,604</b>	<b>-18,185</b>	<b>30,286,596</b>
Newfoundland	571,657	5,599	3,947	469	287	-9,285	139	-53	563,641
Prince Edward Island	136,743	1,697	1,221	189	78	-56	36	-53	137,244
Nova Scotia	943,219	10,404	7,833	3,326	893	-143	390	-25	947,917
New Brunswick	762,031	8,123	5,984	706	1,030	-1,911	467	-34	762,049
Quebec	7,388,028	83,494	53,520	27,486	6,687	-16,625	3,060	-2,938	7,419,890
Ontario	11,258,391	140,047	80,848	118,179	21,012	-4,820	9,617	-11,349	11,407,691
Manitoba	1,140,402	15,592	9,791	4,676	2,485	-3,781	1,105	-444	1,145,242
Saskatchewan	1,019,632	13,001	8,214	1,824	1,076	-1,586	482	-187	1,023,483
Alberta	2,793,263	38,001	16,727	14,046	8,313	24,714	3,774	78	2,847,006
British Columbia	3,857,595	46,792	28,050	52,156	7,603	14,287	3,464	-3,147	3,933,273
Yukon Territory	31,402	463	127	90	68	-132	32	-51	31,632
Northwest Territories	66,846	1,552	229	91	101	-662	38	18	67,528

Source: Statistics Canada, CANSIM, matrices 5772 to 5778 and 6367 to 6379.



3.4 Population Growth Components,<sup>1</sup> 1851 to 1996

Period	Total population growth	Births	Deaths	Natural increase	Ratio of natural increase to total growth	Immigration <sup>2</sup>	Emigration <sup>3</sup>	Net migration	Ratio of net migration to total growth	Census population at the end of period
		thousands			%		thousands		%	thousands
1851–1861	<b>793</b>	1,281	670	611	77.0	352	170	182	23.0	3,230
1861–1871	<b>459</b>	1,370	760	610	132.9	260	411	-151	-32.9	3,689
1871–1881	<b>636</b>	1,480	790	690	108.5	350	404	-54	-8.5	4,325
1881–1891	<b>508</b>	1,524	870	654	128.7	680	826	-146	-28.7	4,833
1891–1901	<b>538</b>	1,548	880	668	124.2	250	380	-130	-24.2	5,371
1901–1911	<b>1,836</b>	1,925	900	1,025	55.8	1,550	739	811	44.2	7,207
1911–1921	<b>1,581</b>	2,340	1,070	1,270	80.3	1,400	1,089	311	19.7	8,788
1921–1931	<b>1,589</b>	2,415	1,055	1,360	85.6	1,200	971	229	14.4	10,377
1931–1941	<b>1,130</b>	2,294	1,072	1,222	108.1	149	241	-92	-8.1	11,507
1941–1951 <sup>4</sup>	<b>2,141</b>	3,186	1,214	1,972	92.1	548	379	169	7.9	13,648
1951–1956	<b>2,072</b>	2,106	633	1,473	71.1	783	184	599	28.9	16,081
1956–1961	<b>2,157</b>	2,362	687	1,675	77.7	760	278	482	22.3	18,238
1961–1966	<b>1,777</b>	2,249	731	1,518	85.4	539	280	259	14.6	20,015
1966–1971 <sup>5</sup>	<b>1,553</b>	1,856	766	1,090	70.2	890	427	463	29.8	21,568
1971–1976 <sup>6</sup>	<b>1,492</b>	1,755	824	931	62.4	1,053	492	561	37.6	23,518
1976–1981	<b>1,382</b>	1,820	843	977	70.7	771	366	405	29.3	24,900
1981–1986	<b>1,304</b>	1,872	885	987	75.7	677	360	317	24.3	26,204
1986–1991	<b>1,907</b>	1,933	946	987	51.8	1,199	279	920	48.2	28,111
1991–1996	<b>1,848</b>	1,935	1,027	908	49.1	1,170	230	940	50.9	29,959

1. Includes Newfoundland since 1951.

2. Starting with July 1, 1971, immigration figures include landed immigrants, returning Canadians plus net change in the numbers of non-permanent residents.

3. Emigration figures are estimated by the residual method.

4. Data on components of growth shown for 1941–1951 were obtained by excluding data for Newfoundland.

5. The June 1, 1971 figure is the census count without adjustment for net census undercount. The July 1, 1971 population adjusted for net census undercount is 22,026,000.

6. Starting with 1971, the reference date is July 1 instead of June 1 and population estimates are based on census counts adjusted for net undercount.

Source: Statistics Canada, Demography Division.

3.5 Births,<sup>1</sup> 1976 to 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Number of births													
1976-77	358,261	10,633	1,958	12,597	11,675	94,362	122,300	16,653	16,328	33,882	36,239	449	1,185
1977-78	359,954	10,071	1,915	12,345	11,082	96,476	121,839	16,708	16,463	34,728	36,679	446	1,202
1978-79	362,226	9,653	2,053	12,608	10,733	96,126	121,719	16,332	16,813	36,422	38,045	490	1,232
1979-80	367,286	10,291	1,935	12,420	10,806	98,355	121,954	15,967	16,906	37,917	38,918	487	1,330
1980-81	372,139	10,325	1,903	12,118	10,603	96,725	123,213	16,058	17,201	41,343	40,882	487	1,281
1981-82	372,472	9,593	1,924	12,173	10,400	93,340	123,120	16,030	17,359	44,016	42,664	547	1,306
1982-83	373,594	9,142	1,910	12,317	10,620	88,580	126,841	16,461	17,856	45,470	42,398	540	1,459
1983-84	374,533	8,724	1,895	12,397	10,424	88,172	127,980	16,558	17,912	44,845	43,657	526	1,443
1984-85	376,265	8,323	1,977	12,579	10,162	86,919	131,884	16,901	18,137	43,868	43,549	501	1,465
1985-86	375,381	8,346	2,055	12,316	10,104	85,584	133,481	17,091	17,916	44,166	42,401	462	1,459
1986-87	373,021	7,899	1,916	12,321	9,623	84,539	134,909	17,178	17,461	42,966	42,196	503	1,510
1987-88	370,033	7,656	1,883	12,068	9,493	84,468	135,656	16,860	16,604	41,437	41,876	481	1,551
1988-89	384,035	7,396	1,984	12,263	9,600	89,408	140,808	17,149	16,772	43,106	43,563	490	1,496
1989-90	403,280	7,996	2,028	12,856	9,908	95,673	150,087	17,376	16,499	43,564	45,212	509	1,572
1990-91	402,924	7,354	1,940	12,438	9,654	98,189	150,627	17,287	15,655	42,544	45,056	554	1,626
1991-92	403,107	6,929	1,866	12,028	9,429	97,704	152,065	17,018	15,177	42,737	46,055	576	1,523
1992-93	392,180	6,689	1,820	11,631	9,333	93,750	148,738	16,522	14,631	40,992	45,959	546	1,569
1993-94	386,159	6,423	1,725	11,354	8,961	91,303	147,147	16,618	14,068	40,093	46,422	440	1,605
1994-95	381,994	6,138	1,686	10,806	8,729	89,092	147,232	16,452	13,795	39,064	47,000	462	1,538
1995-96	371,270	5,812	1,712	10,607	8,367	86,414	142,256	15,822	13,239	38,402	46,601	456	1,582
1996-97	364,765	5,599	1,697	10,404	8,123	83,494	140,047	15,592	13,001	38,001	46,792	463	1,552
Birth rate per 1,000													
1976-77	15.1	18.8	16.3	15.0	16.7	14.6	14.3	16.0	17.2	17.3	14.0	19.5	26.3
1981-82	14.8	16.6	15.5	14.1	14.6	14.1	13.8	15.3	17.5	18.5	14.8	22.2	26.1
1986-87	14.0	13.7	14.9	13.7	13.2	12.4	13.9	15.6	16.8	17.6	13.8	19.4	27.1
1991-92	14.1	11.9	14.2	13.0	12.5	13.6	14.3	15.2	15.1	16.1	13.2	19.0	24.3
1992-93	13.5	11.4	13.7	12.5	12.4	13.0	13.8	14.7	14.5	15.3	12.9	17.8	24.7
1993-94	13.2	11.0	12.8	12.1	11.8	12.5	13.5	14.7	13.9	14.8	12.6	14.7	24.7
1994-95	12.9	10.6	12.5	11.5	11.5	12.1	13.3	14.5	13.6	14.2	12.5	15.2	23.3
1995-96	12.4	10.2	12.5	11.2	11.0	11.7	12.6	13.9	13.0	13.7	12.1	14.5	23.7
1996-97	12.0	9.9	12.4	11.0	10.7	11.3	12.3	13.6	12.7	13.3	11.9	14.6	23.0

1. From July 1 to June 30.

Source: Statistics Canada, CANSIM, matrix 5772.

3.6 Deaths,<sup>1</sup> 1976 to 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Number of deaths													
1976-77	165,747	3,192	1,077	7,075	5,160	43,015	60,226	8,205	7,830	11,461	18,207	110	169
1977-78	169,030	3,139	1,019	6,765	5,189	43,782	62,128	8,233	7,657	11,907	18,917	97	197
1978-79	165,805	3,144	966	6,868	5,117	42,519	60,248	8,261	7,318	11,938	19,101	119	206
1979-80	171,460	3,285	1,065	6,937	5,279	44,139	62,837	8,388	7,642	12,309	19,237	128	214
1980-81	170,535	3,232	1,002	7,006	5,141	42,768	62,694	8,362	7,514	12,751	19,729	117	219
1981-82	172,352	3,322	1,007	6,923	5,151	42,864	62,947	8,779	7,822	13,002	20,165	141	229
1982-83	176,522	3,465	1,011	7,085	5,356	44,943	64,895	8,436	7,969	12,746	20,277	117	222
1983-84	174,159	3,548	1,106	7,055	5,169	43,630	64,058	8,442	7,675	12,738	20,392	105	241
1984-85	179,085	3,478	1,090	6,988	5,288	45,362	66,436	8,471	7,872	12,942	20,804	124	250
1985-86	183,353	3,575	1,091	7,270	5,394	46,554	67,149	8,907	8,128	13,494	21,444	109	238
1986-87	182,599	3,578	1,129	7,218	5,342	46,389	67,390	8,754	7,862	13,338	21,287	108	204
1987-88	189,917	3,612	1,112	7,190	5,472	48,405	70,232	9,066	8,079	13,739	22,665	135	210
1988-89	188,408	3,611	1,085	7,456	5,466	47,889	69,657	8,779	7,875	13,687	22,559	108	236
1989-90	192,608	3,894	1,103	7,562	5,553	48,695	71,274	8,887	8,059	13,979	23,267	100	235
1990-91	192,437	3,816	1,199	7,248	5,354	48,241	71,506	8,770	7,921	14,335	23,726	116	205
1991-92	196,968	3,791	1,167	7,486	5,499	49,191	73,611	8,999	8,061	14,501	24,281	121	260
1992-93	201,808	3,815	1,122	7,560	5,802	50,648	74,638	9,247	8,013	14,938	25,629	125	271
1993-94	206,465	3,977	1,120	7,544	5,873	51,581	77,302	9,184	8,273	15,757	25,476	128	250
1994-95	209,435	4,111	1,143	8,072	5,894	51,849	78,166	9,243	8,244	15,632	26,716	124	241
1995-96	212,233	3,933	1,189	7,720	5,918	53,103	78,951	9,602	8,217	16,199	27,031	142	228
1996-97	216,491	3,947	1,221	7,833	5,984	53,520	80,848	9,791	8,214	16,727	28,050	127	229
Death rate per 1,000													
1976-77	7.0	5.6	9.0	8.4	7.4	6.7	7.1	7.9	8.3	5.9	7.1	4.8	4.2
1981-82	6.8	5.8	8.1	8.0	7.3	6.5	7.0	8.4	7.9	5.5	7.0	5.7	4.6
1986-87	6.9	6.2	8.8	8.1	7.3	6.8	7.0	8.0	7.6	5.5	6.9	4.2	3.7
1991-92	6.9	6.5	8.9	8.1	7.3	6.9	6.9	8.1	8.0	5.5	7.0	4.0	4.2
1992-93	7.0	6.5	8.4	8.1	7.7	7.0	6.9	8.2	7.9	5.6	7.2	4.1	4.3
1993-94	7.1	6.8	8.3	8.1	7.8	7.1	7.1	8.1	8.2	5.8	6.9	4.3	3.8
1994-95	7.1	7.1	8.4	8.6	7.8	7.1	7.0	8.1	8.1	5.7	7.1	4.1	3.6
1995-96	7.1	6.9	8.7	8.2	7.8	7.2	7.0	8.4	8.1	5.8	7.0	4.5	3.1
1996-97	7.1	7.0	8.9	8.3	7.9	7.2	7.1	8.5	8.0	5.9	7.1	4.0	3.4

1. From July 1 to June 30.

Source: Statistics Canada, CANSIM, matrix 5773.



3.7 Non-Immigrant<sup>1</sup> Population by Place of Birth and Place of Residence,<sup>2</sup> 1996

	Province or territory of residence												
	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
<b>Total non-immigrants</b>	<b>23,390,340</b>	<b>537,650</b>	<b>128,310</b>	<b>856,405</b>	<b>704,205</b>	<b>6,339,165</b>	<b>7,844,375</b>	<b>960,690</b>	<b>921,690</b>	<b>2,252,990</b>	<b>2,756,530</b>	<b>27,380</b>	<b>60,940</b>
Born in Canada	23,320,310	537,170	128,010	853,925	702,260	6,328,965	7,815,095	957,710	920,265	2,244,785	2,744,060	27,250	60,810
Place of birth													
Newfoundland	700,350	509,160	2,025	26,515	8,760	10,000	94,545	3,920	1,440	22,630	18,790	625	1,935
Prince Edward Island	150,860	545	103,405	8,670	5,500	2,885	18,645	765	595	5,230	4,320	105	185
Nova Scotia	960,685	5,730	6,650	711,580	28,965	11,455	122,775	5,960	2,835	28,005	35,070	510	1,135
New Brunswick	811,315	2,370	4,440	28,265	597,945	47,385	82,805	6,015	2,040	19,040	20,070	230	695
Quebec	6,597,980	2,700	1,985	15,010	22,625	6,074,680	344,995	9,440	4,580	46,680	72,715	1,040	1,530
Ontario	7,572,680	12,435	6,870	44,360	28,670	152,440	6,846,565	45,385	23,270	160,190	245,095	3,240	4,155
Manitoba	1,189,785	895	365	4,080	2,250	7,985	92,435	809,765	38,795	91,420	135,095	1,435	5,250
Saskatchewan	1,342,470	425	500	2,745	1,295	5,240	69,700	46,305	794,125	217,035	200,620	1,930	2,545
Alberta	1,967,205	1,720	1,185	6,890	3,540	8,100	76,225	17,885	36,870	1,545,980	260,765	3,315	4,720
British Columbia	1,954,555	950	480	5,310	2,395	7,495	61,765	11,345	14,675	101,395	1,742,695	4,230	1,810
Yukon Territory	21,855	60	60	205	155	490	1,695	355	355	2,420	5,700	10,105	255
Northwest Territories	50,575	165	40	290	150	825	2,940	560	670	4,745	3,120	465	36,590
Born outside Canada	70,030	485	295	2,480	1,945	10,200	29,280	2,985	1,430	8,205	12,475	130	125

1. Persons who are Canadian citizens by birth.

2. Based on a 20% sample of the population.

Source: Statistics Canada, Catalogue no. 93-316.

## 3.8 Population by Sex and Age

	1976			1996			1976			1996		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	thousands						% of total population					
<b>All ages</b>	<b>23,517.5</b>	<b>11,764.9</b>	<b>11,752.6</b>	<b>29,963.6</b>	<b>14,845.0</b>	<b>15,118.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
0-4	1,764.1	904.7	859.3	1,960.9	1,005.9	955.0	7.5	7.7	7.3	6.5	6.8	6.3
5-9	1,913.9	980.9	933.0	2,015.8	1,031.3	984.5	8.1	8.3	7.9	6.7	6.9	6.5
10-14	2,294.3	1,173.5	1,120.8	2,019.6	1,031.9	987.7	9.8	10.0	9.5	6.7	7.0	6.5
15-19	2,394.9	1,220.4	1,174.5	2,002.9	1,026.3	976.5	10.2	10.4	10.0	6.7	6.9	6.5
20-24	2,270.7	1,144.2	1,126.6	2,036.3	1,033.5	1,002.9	9.7	9.7	9.6	6.8	7.0	6.6
25-29	2,072.5	1,052.4	1,020.2	2,223.5	1,121.5	1,102.1	8.8	8.9	8.7	7.4	7.6	7.3
30-34	1,689.3	861.7	827.6	2,631.2	1,334.0	1,297.2	7.2	7.3	7.0	8.8	9.0	8.6
35-39	1,356.9	692.2	664.7	2,666.4	1,343.9	1,322.5	5.8	5.9	5.7	8.9	9.1	8.7
40-44	1,289.1	659.0	630.1	2,387.5	1,191.8	1,195.7	5.5	5.6	5.4	8.0	8.0	7.9
45-49	1,269.0	642.2	626.8	2,159.5	1,084.8	1,074.7	5.4	5.5	5.3	7.2	7.3	7.1
50-54	1,230.7	602.4	628.3	1,672.2	838.2	834.0	5.2	5.1	5.3	5.6	5.6	5.5
55-59	1,032.2	500.5	531.7	1,332.6	661.9	670.7	4.4	4.3	4.5	4.4	4.5	4.4
60-64	914.2	441.7	472.5	1,213.1	596.2	616.9	3.9	3.8	4.0	4.0	4.0	4.1
65-69	729.5	344.0	385.5	1,129.3	536.2	593.1	3.1	2.9	3.3	3.8	3.6	3.9
70-74	539.8	245.0	294.8	979.9	432.8	547.1	2.3	2.1	2.5	3.3	2.9	3.6
75-79	366.7	152.9	213.8	704.3	289.2	415.1	1.6	1.3	1.8	2.4	1.9	2.7
80-84	222.9	86.5	136.4	467.6	174.9	292.7	0.9	0.7	1.2	1.6	1.2	1.9
85-89	113.7	42.1	71.6	240.6	78.3	162.3	0.5	0.4	0.6	0.8	0.5	1.1
90 and over	53.0	18.7	34.3	120.5	32.5	88.0	0.2	0.2	0.3	0.4	0.2	0.6

Source: Statistics Canada, CANSIM, matrix 6367.

## 3.9 Population by Age

		All ages	Age group					
			0-14		15-64		65 and over	
			thousands	%	thousands	%	thousands	%
Canada	1976	23,517.5	5,972.3	25.4	15,519.7	66.0	2,025.5	8.6
	1986	26,203.8	5,496.6	21.0	17,964.9	68.6	2,742.3	10.5
	1996	29,963.6	5,996.2	20.0	20,325.2	67.8	3,642.2	12.2
	Male	14,845.0	3,069.1	20.7	10,232.1	68.9	1,543.9	10.4
	Female	15,118.6	2,927.2	19.4	10,093.2	66.8	2,098.3	13.9
Newfoundland	1976	563.9	188.6	33.4	338.5	60.0	36.8	6.5
	1986	578.1	147.6	25.5	380.1	65.8	50.4	8.7
	1996	570.7	111.5	19.5	398.9	69.9	60.2	10.6
	Male	285.2	56.9	20.0	201.4	70.6	26.9	9.4
	Female	285.5	54.6	19.1	197.6	69.2	33.3	11.7
Prince Edward Island	1976	118.8	33.3	28.0	72.2	60.8	13.3	11.2
	1986	128.8	29.5	22.9	83.0	64.5	16.3	12.6
	1996	137.3	29.2	21.3	90.3	65.7	17.9	13.0
	Male	67.7	15.0	22.2	45.1	66.6	7.6	11.2
	Female	69.6	14.2	20.3	45.2	64.9	10.3	14.8
Nova Scotia	1976	836.6	224.6	26.8	530.9	63.5	81.1	9.7
	1986	892.1	189.5	21.2	597.8	67.0	104.8	11.8
	1996	942.8	183.3	19.4	639.1	67.8	120.5	12.8
	Male	464.3	94.0	20.2	320.4	69.0	50.0	10.8
	Female	478.5	89.3	18.7	318.7	66.6	70.5	14.7
New Brunswick	1976	691.5	195.4	28.3	434.4	62.8	61.8	8.9
	1986	727.7	162.8	22.4	485.1	66.7	79.8	11.0
	1996	762.5	146.8	19.3	520.1	68.2	95.6	12.5
	Male	377.3	74.9	19.9	262.0	69.4	40.4	10.7
	Female	385.2	71.9	18.7	258.1	67.0	55.2	14.3
Quebec	1976	6,420.5	1,579.8	24.6	4,350.8	67.8	489.8	7.6
	1986	6,733.8	1,360.4	20.2	4,714.6	70.0	658.8	9.8
	1996	7,389.1	1,388.8	18.8	5,103.7	69.1	896.7	12.1
	Male	3,642.6	710.2	19.5	2,567.0	70.5	365.4	10.0
	Female	3,746.6	678.6	18.1	2,536.7	67.7	531.3	14.2
Ontario	1976	8,432.1	2,094.6	24.8	5,591.6	66.3	745.9	8.8
	1986	9,477.2	1,917.1	20.2	6,549.1	69.1	1,011.0	10.7
	1996	11,252.4	2,256.4	20.1	7,618.8	67.7	1,377.2	12.2
	Male	5,560.5	1,155.1	20.8	3,820.4	68.7	585.0	10.5
	Female	5,691.9	1,101.3	19.3	3,798.5	66.7	792.2	13.9



## 3.9 Population by Age (concluded)

			Age group						
			All ages	0–14		15–64		65 and over	
				thousands	%	thousands	%	thousands	%
Manitoba	1976	1,033.7	266.5	25.8	660.0	63.8	107.2	10.4	
	1986	1,094.0	239.5	21.9	718.8	65.7	135.7	12.4	
	1996	1,143.5	246.7	21.6	741.4	64.8	155.4	13.6	
	Male	567.4	126.9	22.4	375.3	66.1	65.3	11.5	
	Female	576.1	119.8	20.8	366.2	63.6	90.1	15.6	
Saskatchewan	1976	933.8	249.8	26.8	581.2	62.2	102.8	11.0	
	1986	1,032.9	249.0	24.1	654.1	63.3	129.8	12.6	
	1996	1,022.5	233.7	22.9	640.3	62.6	148.5	14.5	
	Male	507.8	119.2	23.5	323.9	63.8	64.7	12.7	
	Female	514.7	114.5	22.3	316.3	61.5	83.8	16.3	
Alberta	1976	1,874.3	508.6	27.1	1,226.4	65.4	139.3	7.4	
	1986	2,438.7	570.9	23.4	1,674.0	68.6	193.8	7.9	
	1996	2,789.5	625.6	22.4	1,890.0	67.8	273.9	9.8	
	Male	1,404.6	320.8	22.8	963.4	68.6	120.4	8.5	
	Female	1,385.0	304.8	22.0	926.6	66.9	153.6	11.1	
British Columbia	1976	2,545.0	607.7	23.9	1,691.7	66.5	245.7	9.7	
	1986	3,020.4	606.6	20.1	2,054.3	68.0	359.4	11.9	
	1996	3,855.1	745.2	19.3	2,617.1	67.9	492.8	12.8	
	Male	1,916.8	381.1	19.9	1,319.2	68.8	216.5	11.3	
	Female	1,938.3	364.2	18.8	1,297.9	67.0	276.2	14.3	
Yukon Territory	1976	22.6	6.5	28.8	15.4	68.2	0.7	2.9	
	1986	24.8	6.1	24.6	17.7	71.6	0.9	3.7	
	1996	31.5	7.4	23.6	22.6	71.9	1.4	4.5	
	Male	16.1	3.8	23.6	11.5	71.5	0.8	4.1	
	Female	15.3	3.6	23.6	11.1	72.3	0.6	4.2	
Northwest Territories	1976	44.6	16.8	37.6	26.6	59.7	1.2	2.7	
	1986	55.4	17.6	31.7	36.2	65.3	1.6	3.0	
	1996	66.6	21.5	32.3	43.0	64.6	2.0	3.1	
	Male	34.6	11.1	32.1	22.5	64.9	1.0	3.0	
	Female	31.9	10.4	32.6	20.5	64.2	1.0	3.2	

Source: Statistics Canada, CANSIM, matrices 6367 to 6379.

3.10 Population of Census Metropolitan Areas<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996	Average annual growth rate 1988–1996
	thousands									%
Toronto (Ontario)	3,813.2	3,937.8	4,000.4	4,036.3	4,116.9	4,198.2	4,256.0	4,346.3	4,444.7	1.9
Montréal (Quebec)	3,112.3	3,167.3	3,195.1	3,213.2	3,251.1	3,288.9	3,308.4	3,335.6	3,359.0	1.0
Vancouver (British Columbia)	1,524.9	1,573.9	1,613.2	1,648.7	1,690.8	1,734.3	1,779.8	1,832.9	1,891.4	2.7
Ottawa–Hull (Ontario–Quebec)	884.0	907.5	932.0	952.2	974.6	997.7	1,010.7	1,023.2	1,030.5	1.9
Edmonton (Alberta)	808.7	823.5	841.7	856.3	870.7	880.3	881.7	884.7	891.5	1.2
Calgary (Alberta)	711.4	729.8	752.3	768.7	785.4	798.2	812.8	831.8	851.6	2.3
Québec (Quebec)	633.6	643.0	653.3	663.1	672.3	682.6	689.4	693.4	697.6	1.2
Winnipeg (Manitoba)	651.9	654.7	659.6	664.2	667.9	671.7	673.4	677.3	676.7	0.5
Hamilton (Ontario)	597.3	610.3	617.6	621.8	626.8	631.1	635.8	643.1	650.4	1.1
London (Ontario)	369.7	380.4	390.9	395.6	400.5	404.3	408.3	413.2	416.1	1.5
Kitchener (Ontario)	341.4	353.8	364.1	369.5	376.3	382.3	388.5	395.4	403.3	2.1
St. Catharines–Niagara (Ontario)	361.3	367.3	373.7	378.0	381.8	383.7	384.4	386.5	389.7	1.0
Halifax (Nova Scotia)	312.1	317.7	322.8	326.9	331.4	335.0	338.8	342.5	346.8	1.3
Victoria (British Columbia)	277.5	284.6	290.8	296.4	300.9	304.8	308.3	311.4	313.4	1.5
Windsor (Ontario)	266.1	268.4	270.6	271.7	274.4	277.7	281.5	285.9	291.7	1.2
Oshawa (Ontario)	228.6	239.5	244.6	248.9	256.7	263.4	269.6	275.6	280.9	2.6
Saskatoon (Saskatchewan)	212.0	212.7	212.5	213.6	215.6	216.9	217.9	220.5	222.1	0.6
Regina (Saskatchewan)	195.2	194.8	194.6	195.0	196.1	197.3	197.8	198.6	199.2	0.3
St. John's (Newfoundland)	167.8	170.4	173.1	175.4	177.4	178.6	178.5	178.5	177.8	0.7
Chicoutimi–Jonquière (Quebec)	161.9	162.4	163.6	165.0	165.7	166.9	167.2	167.0	166.6	0.4
Sudbury (Ontario)	154.4	157.2	160.3	163.4	166.0	166.9	166.6	166.4	166.2	0.9
Sherbrooke (Quebec)	137.7	139.9	141.2	142.7	144.1	145.4	146.8	148.2	150.0	1.1
Trois-Rivières (Quebec)	135.0	136.3	138.0	139.8	141.4	141.9	142.5	143.2	143.6	0.8
Saint John (New Brunswick)	125.6	127.0	128.3	128.9	129.4	129.6	129.4	129.3	129.1	0.3
Thunder Bay (Ontario)	127.1	127.5	128.2	129.0	130.2	130.6	130.7	131.0	131.3	0.4

1. On July 1 of each year.

Source: Statistics Canada, CANSIM, matrix 6231.

3.11 Population Projections<sup>1</sup>

	1996 <sup>2</sup>			2001			2006			2011			2016		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	thousands														
All ages	29,963.7	14,836.8	15,126.9	31,877.3	15,781.2	16,096.1	33,677.5	16,674.3	17,003.2	35,420.3	17,541.8	17,878.5	37,119.8	18,387.5	18,732.2
0-4	1,991.5	1,021.8	969.7	1,924.3	988.2	936.2	1,924.6	988.4	936.2	1,980.1	1,017.0	963.1	2,052.8	1,054.4	998.4
5-9	2,036.9	1,043.3	993.5	2,082.2	1,069.0	1,013.1	2,016.0	1,035.9	980.1	2,016.6	1,036.4	980.3	2,072.2	1,065.0	1,007.2
10-14	2,035.2	1,041.4	993.8	2,124.8	1,089.2	1,035.6	2,170.1	1,115.0	1,055.2	2,104.8	1,082.3	1,022.5	2,105.7	1,082.9	1,022.8
15-19	1,996.3	1,023.8	972.5	2,124.5	1,088.0	1,036.4	2,213.7	1,135.8	1,078.0	2,259.2	1,161.6	1,097.6	2,194.8	1,129.5	1,065.4
20-24	2,027.0	1,031.8	995.2	2,115.2	1,080.1	1,035.0	2,242.9	1,144.3	1,098.6	2,332.3	1,192.2	1,140.1	2,378.2	1,218.3	1,159.9
25-29	2,217.5	1,119.4	1,098.1	2,177.7	1,103.0	1,074.7	2,265.9	1,151.5	1,114.5	2,392.8	1,215.3	1,177.5	2,482.2	1,263.3	1,218.9
30-34	2,615.4	1,324.2	1,291.2	2,366.4	1,192.9	1,173.4	2,328.3	1,177.5	1,150.8	2,416.1	1,225.8	1,190.3	2,541.4	1,288.9	1,252.5
35-39	2,657.3	1,337.4	1,319.9	2,723.4	1,376.1	1,347.3	2,479.5	1,248.0	1,231.5	2,443.0	1,233.4	1,209.6	2,530.4	1,281.5	1,248.9
40-44	2,377.8	1,185.3	1,192.5	2,716.3	1,363.9	1,352.3	2,782.9	1,403.0	1,379.8	2,544.5	1,278.2	1,266.2	2,509.9	1,264.8	1,245.1
45-49	2,146.6	1,077.5	1,069.1	2,399.6	1,193.9	1,205.7	2,734.2	1,370.2	1,363.9	2,801.9	1,410.1	1,391.8	2,569.5	1,289.1	1,280.4
50-54	1,667.4	835.7	831.7	2,140.1	1,069.8	1,070.3	2,391.1	1,185.4	1,205.7	2,722.0	1,359.6	1,362.4	2,791.4	1,400.6	1,390.8
55-59	1,327.3	659.5	667.8	1,651.4	820.1	831.3	2,113.8	1,048.2	1,065.7	2,362.2	1,162.6	1,199.6	2,688.7	1,334.1	1,354.5
60-64	1,209.4	593.8	615.6	1,300.9	636.8	664.0	1,615.3	791.5	823.7	2,063.6	1,011.0	1,052.6	2,308.2	1,123.7	1,184.5
65-69	1,129.7	535.9	593.9	1,154.0	554.2	599.7	1,244.6	597.0	647.6	1,544.5	742.8	801.7	1,971.6	949.4	1,022.2
70-74	980.4	432.7	547.7	1,027.1	470.6	556.6	1,054.0	490.0	564.1	1,142.5	531.6	610.8	1,420.6	664.2	756.4
75-79	704.9	288.9	416.0	831.9	345.9	486.1	877.1	380.4	496.7	906.1	400.1	506.0	989.8	439.0	550.7
80-84	471.7	174.8	296.9	541.8	201.3	340.5	644.0	244.1	399.9	685.0	272.9	412.1	714.1	291.2	422.9
85-89	245.8	78.7	167.2	308.5	98.3	210.2	361.0	116.4	244.6	433.2	143.7	289.5	466.5	164.4	302.0
90 and over	125.4	30.9	94.5	167.4	39.8	127.6	218.5	51.9	166.6	269.9	65.1	204.8	331.7	83.0	248.7

1. Figures represent a medium-growth projection.

2. These are projections based on 1993 estimates. Users should be aware that for the years 1994 to the current year, there exist annual population estimates which are published in Catalogue no. 91-213-XPB.

Source: Statistics Canada, CANSIM, matrix 6900.



3.12 Immigrants by Place of Birth,<sup>1</sup> 1996

	Immigrant population	Period of immigration									
		Before 1961		1961–1970		1971–1980		1981–1990		1991–1996 <sup>2</sup>	
		Number	%	Number	%	Number	%	Number	%	Number	%
<b>All places of birth</b>	<b>4,971,070</b>	<b>1,054,930</b>	<b>100.0</b>	<b>788,580</b>	<b>100.0</b>	<b>996,160</b>	<b>100.0</b>	<b>1,092,400</b>	<b>100.0</b>	<b>1,038,990</b>	<b>100.0</b>
Southern Europe	714,380	228,145	21.6	244,380	31.0	131,620	13.2	57,785	5.3	52,455	5.0
United Kingdom	655,540	265,580	25.2	168,140	21.3	132,950	13.3	63,445	5.8	25,420	2.4
Eastern Asia	589,420	20,555	1.9	38,865	4.9	104,940	10.5	172,715	15.8	252,340	24.3
Other Northern and Western Europe	514,310	284,205	26.9	90,465	11.5	59,850	6.0	48,095	4.4	31,705	3.1
Eastern Europe	447,830	175,430	16.6	40,855	5.2	32,280	3.2	111,370	10.2	87,900	8.5
Southeast Asia	408,985	2,485	0.2	14,040	1.8	111,700	11.2	162,490	14.9	118,265	11.4
Southern Asia	353,515	4,565	0.4	28,875	3.7	80,755	8.1	99,270	9.1	140,055	13.5
Caribbean and Bermuda	279,405	8,390	0.8	45,270	5.7	96,025	9.6	72,405	6.6	57,315	5.5
Central and South America	273,820	6,370	0.6	17,410	2.2	67,470	6.8	106,230	9.7	76,335	7.3
United States	244,695	45,050	4.3	50,200	6.4	74,015	7.4	46,405	4.2	29,025	2.8
Africa	229,300	4,945	0.5	25,685	3.3	58,150	5.8	64,265	5.9	76,260	7.3
West-Central Asia and Middle East	210,850	4,975	0.5	15,165	1.9	30,980	3.1	77,685	7.1	82,050	7.9
Oceania and Other	49,025	4,250	0.4	9,240	1.2	15,420	1.5	10,240	0.9	9,875	1.0

1. Based on data from a 20% sample of the population. Non-permanent residents are not included in this table.

2. Includes first five months only of 1996.

Source: Statistics Canada, 1996 Census Nation Tables.

3.13 Interprovincial Migrants,<sup>1</sup> 1995–96

Province of origin	Total out-migrants	Nfld.	P.E.I.	N.S.	N.B.	Province of destination							
						Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Newfoundland	18,238	—	305	2,629	848	351	7,890	434	111	2,747	2,350	170	403
Prince Edward Island	2,602	230	—	470	560	43	773	60	38	179	240	—	9
Nova Scotia	21,194	1,577	830	—	2,897	946	7,976	590	300	2,773	3,080	41	184
New Brunswick	14,835	687	540	2,683	—	2,444	4,874	332	216	1,494	1,433	22	110
Quebec	41,307	287	99	1,137	2,593	—	27,522	708	438	2,131	6,157	61	174
Ontario	89,969	5,360	1,077	8,115	4,960	19,153	—	6,348	2,581	13,668	28,093	233	381
Manitoba	22,757	97	117	442	323	528	6,346	—	3,216	5,636	5,602	104	346
Saskatchewan	24,219	63	33	337	138	387	2,498	3,522	—	11,625	5,243	153	220
Alberta	61,192	1,222	288	1,912	1,245	1,564	10,368	4,071	11,027	—	27,322	723	1,450
British Columbia	57,681	930	155	2,450	911	2,482	15,418	4,256	4,974	24,326	—	1,260	519
Yukon Territory	2,073	13	9	32	16	27	214	67	75	542	1,024	—	54
Northwest Territories	4,551	199	29	94	116	165	511	423	500	1,810	597	107	—
Total in-migrants	360,618	10,665	3,482	20,301	14,607	28,090	84,390	20,811	23,476	66,931	81,141	2,874	3,850
<b>Net interprovincial migration</b>	<b>...</b>	<b>-7,573</b>	<b>880</b>	<b>-893</b>	<b>-228</b>	<b>-13,217</b>	<b>-5,579</b>	<b>-1,946</b>	<b>-743</b>	<b>5,739</b>	<b>23,460</b>	<b>801</b>	<b>-701</b>

1. From July 1 of one year to June 30 of the next year.

Source: Statistics Canada, CANSIM, matrix 6365.

## 3.14 Official Language Knowledge

	Total	English only		French only		Both English and French		Neither English nor French	
	Number	Number	%	Number	%	Number	%	Number	%
1931 <sup>1</sup>	10,376,786	6,999,913	67.5	1,779,338	17.1	1,322,370	12.7	275,165	2.7
1941 <sup>1</sup>	11,506,655	7,735,486	67.2	2,181,746	19.0	1,474,009	12.8	115,414	1.0
1951	14,009,429	9,387,395	67.0	2,741,812	19.6	1,727,447	12.3	152,775	1.1
1961	18,238,247	12,284,762	67.4	3,489,866	19.1	2,231,172	12.2	232,447	1.3
1971	21,568,310	14,469,540	67.1	3,879,255	18.0	2,900,155	13.4	319,360	1.5
1981 <sup>2</sup>	24,083,495	16,122,895	66.9	3,987,245	16.6	3,681,960	15.3	291,395	1.2
1991 <sup>2</sup>	26,994,035	18,106,760	67.1	4,110,300	15.2	4,398,655	16.3	378,320	1.4
1996 <sup>2</sup>	28,528,125	19,134,245	67.1	4,079,085	14.3	4,841,320	17.0	473,475	1.7
1996 <sup>2</sup>									
Newfoundland	547,160	525,190	96.0	155	--	21,260	3.9	550	0.1
Prince Edward Island	132,855	118,075	88.9	170	0.1	14,570	11.0	35	--
Nova Scotia	899,970	813,320	90.4	1,370	0.2	83,980	9.3	1,295	0.1
New Brunswick	729,625	417,970	57.3	73,410	10.1	237,765	32.6	475	0.1
Quebec	7,045,085	358,505	5.1	3,951,710	56.1	2,660,590	37.8	74,275	1.1
Ontario	10,642,790	9,116,165	85.7	46,940	0.4	1,234,895	11.6	244,790	2.3
Manitoba	1,100,290	983,820	89.4	1,495	0.1	103,140	9.4	11,840	1.1
Saskatchewan	976,615	920,555	94.3	345	--	50,770	5.2	4,945	0.5
Alberta	2,669,195	2,455,075	92.0	1,615	0.1	178,505	6.7	33,995	1.3
British Columbia	3,689,755	3,342,350	90.6	1,780	--	248,585	6.7	97,045	2.6
Yukon Territory	30,650	27,340	89.2	50	0.2	3,210	10.5	50	0.2
Northwest Territories	64,125	55,880	87.1	45	0.1	4,035	6.3	4,170	6.5

1. Excluding Newfoundland.

2. The 1981, 1991 and 1996 figures exclude institutional residents who represent approximately 1% of the total population.

Source: Statistics Canada, 1996 Census Nation Tables.

**3.15 Total Population by Ethnic Categories,<sup>1</sup> 1996 Census**

	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Y. T.	N. W. T.
<b>Total population</b>	<b>28,528,125</b>	<b>547,160</b>	<b>132,855</b>	<b>899,970</b>	<b>729,630</b>	<b>7,045,080</b>	<b>10,642,790</b>	<b>1,100,295</b>	<b>976,615</b>	<b>2,669,195</b>	<b>3,689,755</b>	<b>30,650</b>	<b>64,125</b>
<b>Single origins</b>	<b>18,303,625</b>	<b>400,345</b>	<b>64,345</b>	<b>472,205</b>	<b>441,200</b>	<b>5,851,025</b>	<b>6,457,115</b>	<b>605,750</b>	<b>491,505</b>	<b>1,394,770</b>	<b>2,064,200</b>	<b>15,395</b>	<b>45,765</b>
British Isles origins	3,267,520	264,680	35,055	203,020	124,605	168,985	1,478,430	105,155	86,115	278,840	515,495	3,130	4,000
French origins	2,683,840	7,025	8,085	35,720	119,115	2,062,150	302,550	33,525	18,730	47,430	47,910	690	895
European origins	3,742,890	3,465	2,455	35,880	11,060	452,765	1,894,805	228,405	192,650	433,445	483,000	2,620	2,340
Arab origins	188,435	290	430	4,215	910	77,650	81,680	1,075	1,030	15,520	5,545	10	85
West Asian origins	106,870	30	20	510	195	26,635	58,395	875	435	3,445	16,255	45	25
South Asian origins	590,145	775	90	2,660	985	41,490	342,375	9,980	3,185	46,515	141,750	160	185
East and Southeast Asian origins	1,271,450	1,250	380	4,015	1,895	103,590	589,665	40,130	12,940	131,340	385,095	345	800
African origins	137,315	230	40	3,545	440	21,630	92,060	2,915	1,655	7,000	7,705	15	75
Pacific Islands origins	5,765	—	—	—	—	35	440	20	10	750	4,510	—	—
Latin, Central and South American origins	118,640	40	15	185	130	40,875	51,980	2,735	1,220	10,340	11,050	30	35
Caribbean origins	305,290	50	40	705	340	86,295	198,075	4,860	630	9,050	5,175	15	65
Aboriginal origins	477,630	7,765	385	8,130	6,465	55,065	69,385	80,465	72,510	64,650	76,430	3,615	32,755
Canadian origins	5,326,995	114,665	17,305	173,135	174,570	2,655,830	1,289,135	94,955	99,555	341,500	357,280	4,595	4,455
Other origins	80,840	75	45	470	485	58,015	8,145	650	835	4,945	7,000	130	45
<b>Multiple origins<sup>2</sup></b>	<b>10,224,495</b>	<b>146,815</b>	<b>68,510</b>	<b>427,765</b>	<b>288,430</b>	<b>1,194,060</b>	<b>4,185,675</b>	<b>494,540</b>	<b>485,110</b>	<b>1,274,420</b>	<b>1,625,555</b>	<b>15,250</b>	<b>18,360</b>

1. These figures exclude institutional residents who represent approximately 1% of the total population.

2. Persons who provided more than one ethnic origin are included in the multiple origins category. There is no double counting of the population in this table.

Source: Statistics Canada, 1996 Census Nation Tables.



3.16 Mother Tongue,<sup>1</sup> 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
<b>Total population</b>	<b>28,528,125</b>	<b>547,155</b>	<b>132,855</b>	<b>899,970</b>	<b>729,625</b>	<b>7,045,080</b>	<b>10,642,790</b>	<b>1,100,295</b>	<b>976,615</b>	<b>2,669,195</b>	<b>3,689,755</b>	<b>30,650</b>	<b>64,125</b>
<b>Single responses</b>	<b>28,125,560</b>	<b>546,435</b>	<b>132,415</b>	<b>895,775</b>	<b>723,280</b>	<b>6,944,160</b>	<b>10,470,490</b>	<b>1,081,575</b>	<b>962,815</b>	<b>2,635,470</b>	<b>3,639,815</b>	<b>30,215</b>	<b>63,115</b>
English	16,890,615	538,695	124,805	836,240	473,260	586,435	7,694,635	813,055	816,955	2,159,275	2,785,020	26,405	35,835
French	6,636,660	2,275	5,550	35,040	239,730	5,700,150	479,285	47,665	19,075	52,380	53,040	1,110	1,355
<b>Non-official languages</b>	<b>4,598,290</b>	<b>5,465</b>	<b>2,060</b>	<b>24,495</b>	<b>10,290</b>	<b>657,580</b>	<b>2,296,570</b>	<b>220,855</b>	<b>126,785</b>	<b>423,810</b>	<b>801,755</b>	<b>2,700</b>	<b>25,920</b>
Chinese	715,640	730	225	2,130	1,115	40,520	328,165	9,925	6,525	73,550	252,405	120	225
Italian	484,500	125	35	845	390	130,070	305,155	5,035	895	13,800	28,060	20	80
German	450,140	305	220	2,760	1,520	18,225	159,430	65,295	36,960	76,045	88,400	655	315
Polish	213,410	100	45	800	180	18,460	139,635	10,940	3,475	21,365	18,325	15	70
Spanish	212,890	140	30	445	315	65,810	100,890	4,175	1,675	17,690	21,585	65	65
Portuguese	211,290	90	35	315	195	32,615	150,630	7,565	365	5,335	14,085	20	20
Punjabi	201,785	95	10	390	25	6,935	76,075	4,760	500	16,625	96,220	95	50
Ukrainian	162,695	45	65	290	110	6,335	50,490	30,505	23,355	36,545	14,775	85	100
Arabic	148,555	150	225	2,940	350	58,225	69,210	795	585	11,260	4,745	—	60
Dutch	133,805	130	470	2,180	880	3,650	71,675	4,285	2,250	19,570	28,475	135	105
Tagalog (Pilipino)	133,215	105	45	310	115	7,800	67,920	15,230	1,580	12,995	26,810	60	240
Greek	121,180	100	15	930	205	43,035	64,945	1,220	1,235	2,980	6,470	10	20
Vietnamese	106,515	105	—	420	265	21,620	48,815	2,160	1,625	14,200	16,985	170	155
Cree	76,840	10	—	15	—	10,730	5,465	23,620	21,090	14,355	1,330	30	180
Inuktitut (Eskimo)	26,960	435	—	25	—	7,685	165	40	10	45	45	10	18,495
Other non-official languages	1,198,870	2,800	640	9,700	4,625	185,865	657,905	35,305	24,660	87,450	183,040	1,210	5,740
<b>Multiple responses</b>	<b>402,560</b>	<b>725</b>	<b>440</b>	<b>4,195</b>	<b>6,345</b>	<b>100,920</b>	<b>172,300</b>	<b>18,720</b>	<b>13,800</b>	<b>33,725</b>	<b>49,940</b>	<b>435</b>	<b>1,005</b>
English and French	107,945	295	315	2,400	5,275	50,585	33,935	2,540	1,405	4,945	6,035	105	100
English and non-official language	249,545	405	115	1,635	980	16,430	130,730	15,820	12,130	27,800	42,305	315	875
French and non-official language	35,845	20	15	100	65	28,140	5,335	295	190	670	985	20	15
English, French and non-official language	9,225	—	—	55	25	5,760	2,300	75	70	315	615	—	10

1. The figures exclude institutional residents who represent approximately 1% of the total population.

Source: Statistics Canada, 1996 Census Nation Tables.

3.17 Home Language,<sup>1</sup> 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
<b>Total population</b>	<b>28,528,125</b>	<b>547,160</b>	<b>132,855</b>	<b>899,970</b>	<b>729,630</b>	<b>7,045,080</b>	<b>10,642,790</b>	<b>1,100,290</b>	<b>976,615</b>	<b>2,669,195</b>	<b>3,689,755</b>	<b>30,650</b>	<b>64,125</b>
<b>Single responses</b>	<b>27,947,665</b>	<b>546,425</b>	<b>132,440</b>	<b>895,900</b>	<b>722,300</b>	<b>6,892,900</b>	<b>10,384,340</b>	<b>1,077,255</b>	<b>963,835</b>	<b>2,624,955</b>	<b>3,614,390</b>	<b>30,315</b>	<b>62,610</b>
English	19,031,335	542,270	128,985	864,235	498,845	710,970	8,773,295	960,120	917,065	2,410,655	3,152,455	29,070	43,365
French	6,359,505	880	2,910	19,970	219,385	5,770,920	287,190	22,015	5,380	15,725	14,085	490	550
<b>Non-official languages</b>	<b>2,556,830</b>	<b>3,270</b>	<b>545</b>	<b>11,695</b>	<b>4,070</b>	<b>411,010</b>	<b>1,323,850</b>	<b>95,115</b>	<b>41,390</b>	<b>198,575</b>	<b>447,855</b>	<b>755</b>	<b>18700</b>
Chinese	586,805	520	175	1,465	730	33,760	273,955	7,570	4,560	56,590	207,255	80	140
Italian	215,100	20	—	265	100	62,770	136,210	1,800	250	4,635	9,025	10	20
Punjabi	154,485	55	10	190	—	5,345	58,570	3,615	285	12,325	74,015	55	30
Spanish	141,640	30	—	240	95	46,845	68,610	2,540	930	10,560	11,735	20	25
Portuguese	123,325	40	—	110	70	18,470	91,775	4,035	135	2,595	6,090	—	—
Polish	119,640	60	—	290	55	10,295	84,530	4,555	635	10,725	8,460	10	15
German	114,085	40	20	1,020	355	4,135	41,495	21,870	6,975	23,770	14,265	120	15
Vietnamese	93,775	95	—	275	230	20,045	44,000	1,670	1,185	12,050	13,950	145	125
Arabic	91,575	100	105	1,720	85	35,565	44,850	435	330	6,000	2,355	—	30
Tagalog (Pilipino)	72,505	30	—	115	—	4,665	38,575	9,090	860	6,825	12,230	10	110
Greek	68,710	50	—	420	75	28,085	34,915	650	545	1,265	2,695	10	—
Tamil	55,675	35	—	55	—	7,105	47,320	165	55	330	600	—	10
Cree	49,855	—	—	—	—	9,830	3,425	17,165	12,410	6,895	85	—	30
Persian (Farsi)	44,485	10	10	155	45	6,355	26,280	390	250	1,185	9,745	45	15
Korean	41,985	—	10	195	—	2,345	22,650	665	105	2,845	13,160	—	10
Ukrainian	32,015	—	20	25	—	2,385	17,405	4,470	2,880	3,750	1,070	—	—
Urdu	27,075	—	—	240	15	3,085	20,320	140	85	1,625	1,555	—	—
Gujarati	26,670	10	—	25	45	3,185	17,665	135	75	2,585	2,940	—	—
Hungarian	24,650	15	—	40	—	3,390	15,710	405	245	1,915	2,905	10	10
Hindi	23,235	—	10	220	65	990	9,840	305	170	2,620	8,995	—	10
Somali	20,515	—	—	—	—	820	18,690	110	20	260	605	—	—
Other non-official language	429,025	2,160	185	4,630	2,105	101,540	207,060	13,335	8,405	27,225	44,120	240	18,105
<b>Multiple responses</b>	<b>580,460</b>	<b>735</b>	<b>415</b>	<b>4,070</b>	<b>7,325</b>	<b>152,185</b>	<b>258,455</b>	<b>23,040</b>	<b>12,780</b>	<b>44,240</b>	<b>75,365</b>	<b>335</b>	<b>1,510</b>
English and French	119,965	255	260	1,440	6,080	65,515	34,985	2,155	875	3,900	4,295	105	100
English and non-official language	397,435	460	150	2,565	1,170	30,255	218,405	20,785	11,870	39,960	70,190	230	1,390
French and non-official language	48,660	20	10	—	25	45,615	2,505	60	10	90	335	—	—
English, French and non-official language	14,395	—	—	60	50	10,805	2,560	40	20	290	545	—	15

1. The figures exclude institutional residents who represent approximately 1% of the total population.

Source: Statistics Canada, 1996 Census Nation Tables.

3.18 Religious Adherence<sup>1</sup>

	1981		1991	
	Number	%	Number	%
<b>Total population<sup>2</sup></b>	<b>24,083,495</b>	<b>100.0</b>	<b>26,994,045</b>	<b>100.0</b>
Catholic	11,402,605	47.3	12,335,255	45.7
Roman Catholic	11,210,385	46.5	12,203,620	45.2
Ukrainian Catholic	190,585	0.8	128,390	0.5
Other Catholic	1,630	--	3,235	--
Protestant	9,914,575	41.2	9,780,715	36.2
United Church	3,758,015	15.6	3,093,120	11.5
Anglican	2,436,375	10.1	2,188,110	8.1
Presbyterian	812,105	3.4	636,295	2.4
Lutheran	702,900	2.9	636,205	2.4
Baptist	696,845	2.9	663,360	2.5
Pentecostal	338,790	1.4	436,435	1.6
Other Protestant	1,169,545	4.9	2,127,190	7.9
Islam	98,165	0.4	253,260	0.9
Buddhist	51,955	0.2	163,415	0.6
Hindu	69,505	0.3	157,010	0.6
Sikh	67,715	0.3	147,440	0.5
Eastern Orthodox	361,565	1.5	387,395	1.4
Jewish	296,425	1.2	318,065	1.2
Para-religious groups	13,450	0.1	28,155	0.1
No religious affiliation	1,783,530	7.4	3,386,365	12.5
Other religions	24,015	0.1	36,970	0.1

1. Data collected every ten years. Next collection due in 2001.

2. Based on sample data, which exclude institutional residents.

Source: Statistics Canada, Catalogue no. 93-319.







## *Health*

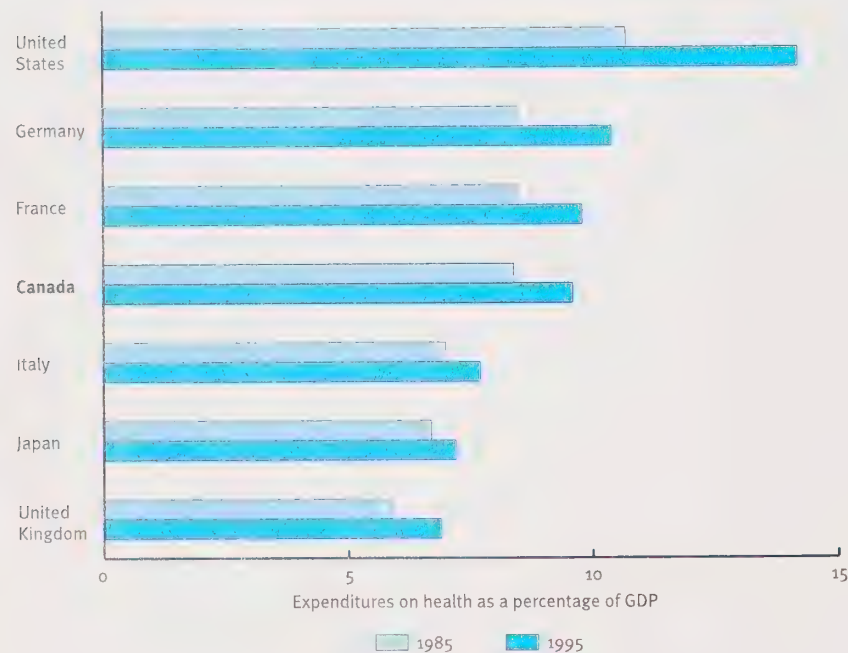
## **C h a p t e r**

*Despite our best efforts to stay in good health, we all, at some point, find ourselves in the healing embrace of the health-care system. Whether it's to provide a flu shot, set a broken bone or repair a heart valve, universal health care is a fact of Canadian life.*

*The idea for this health system dates back to 1919, when William Lyon Mackenzie King first floated the idea of a national, publicly funded health*

insurance plan. Few could have predicted the debate his suggestion would provoke. Another half century passed before the Canadian government, through the initiative and persistence of Tommy Douglas (then premier of Saskatchewan), implemented what was to become a universal medicare system. Some might even say this system defines us as Canadians.

#### Health spending rises in Group of Seven countries



Source: OECD Health Data 97, Organisation for Economic Co-operation and Development.

Many Canadians think of medicare as a sacred trust, as it is predicated on the notion that health care should be available to everyone. But in an era marked by government deficits, health-care spending in Canada has come under much scrutiny. On average, it consumes one-third of provincial budgets and, in 1995, equalled 9.6% of gross domestic product (GDP), which is the total value of all goods and services produced in the country.

The result of this scrutiny has been a transformation from coast to coast. Throughout the late 1980s and the 1990s, there have been hospital bed closures, staff layoffs and caps on physician billings. In 1996, some 70% of health expenditures came from the public sector, down from 75% in 1991.

Consequently, although Canadians spent 1.2% more on health in 1996 than in 1995, a trend to cost control is now firmly in place. Between 1975 and 1991, Canada's health spending grew at an average of more than 11% a year. Between 1991 and 1995, that growth slowed to 3%. Among the seven leading industrialized nations, Canada ranks fourth in health spending as a proportion of GDP, behind the United States, Germany and France. In 1992, health spending was 10.2% of GDP. In 1997, it is forecast to be 9.2%. In comparison, in 1996, the United States spent 14.2% of its GDP on health.

In 1995, Canada's public and private sectors together spent an estimated \$74.6 billion on health care. Of that, 36% was spent on hospitals and another 27% on doctors' bills and drugs. Direct health costs are, however, only one side of the story. Just as important are the costs associated with those who can no longer contribute to society, because of either untimely death or disabling illness. Typically, such costs run in the neighbourhood of \$85 billion every year. In 1993, the combination of all health-care costs—from doctor to pharmacist and from work absence to lost productivity—averaged \$5,450 for every man, woman and child in Canada.



## HOW HEALTHY ARE WE?

While Canadians are concerned about changes to the health-care system, paradoxically, most of us feel quite healthy. In 1994–95, more than six out of 10 Canadians rated their health as very good or better, one-quarter even as excellent. Only one in 10 reported fair or poor health.

Generally, people who arrive in Canada from other lands tend to enjoy above-average health. Partly, this is because those who are willing and able to uproot and move to another country tend to be healthier to begin with, and Canada's immigration policies require that newcomers pass a strict medical exam. In 1994–95, nine in 10 of those born outside Canada rated their health as good to excellent.

By most standards, we really are healthy. There's been much progress in public health, preventive care, medical therapies and safety policies that allow most Canadians to live long, comfortable lives. For instance, a Canadian born at the start of the 1920s might only have expected to live to the age of 60. Today, Canadians can expect to outlive citizens in virtually every country except those in Switzerland, Sweden and Japan. (Men in Australia and Iceland, and women in France have slightly longer life expectancies than their Canadian counterparts.) A Canadian girl born in 1995 can hope to see her 81st birthday; a boy his 75th.

The death rate due to cardiovascular disease is falling. Mortality rates for lung cancer, now the leading cause of cancer deaths in both males and females, are waning for males while they're waxing for females. Lung cancer deaths in males have continued to fall since 1988–89, but for females they have climbed annually. In fact, over the period 1969 to 1996, mortality rates for lung cancer in women have risen every single year. In 1993, lung cancer overtook breast cancer as the major cancer cause of death in females.

Many crippling and deadly childhood diseases have all but been eradicated, and some sexually transmitted diseases like gonorrhea and syphilis have declined significantly.

Since the 1950s, the overall death rate for certain types of cancer has dropped as well as for heart disease, and a variety of other causes, from bronchitis to motor vehicle accidents.



Photo by David Kahn Cline

Open wide.

Where we live in Canada appears to have a strong bearing on our health and well-being. The further west we look, the less likely we are to find people who manifest the characteristics that lead to heart and lung diseases. Principally, these are smoking, lack of exercise, high blood pressure and high blood-cholesterol levels. Between 1986 and 1992, nearly seven in 10 adults in Newfoundland and Nova Scotia reported one of these risk factors, and in Alberta and British Columbia, fewer than six in 10.

Stress is another lifestyle factor that exacts a price in physical and mental health. In 1994-95, more than one in four Canadians said they constantly felt under high levels of stress. Working women, particularly the mothers of young children, are especially vulnerable as they attempt to juggle job and family responsibilities. In 1992 studies, this group consistently reported the highest levels of time stress, along with people with low education levels or who were unhappy with their jobs, and

those who had recently experienced a traumatic event such as the death of a friend or family member.

Chronic and severe stress is associated with depression. In 1994, many of the 1.1 million Canadians (6% of the adult population) who reported having experienced a major bout of depression in the previous year also said they had been under high levels of chronic stress. The most vulnerable were low-income and young women. They had a one in 10 incidence of depression.

## WHAT MAKES US HEALTHY?

Our perspective on personal health care has shifted from a medical focus, which revolves around doctors, hospitals, surgery and drugs, to a more community-based model, with an emphasis on preventive care and alternative practitioners such as midwives.

The trend is not without foundation. For more than 25 years, experts in Canada and elsewhere have observed that while medical care is a big factor in treating illness and maintaining health, it is neither the only factor, nor the most important.

Genetics, exercise, nutrition and the environment all play a role in the quality of our health. Equally, there's a striking relationship between social class and well-being. People with higher incomes are, by and large, also healthier. The Japanese, for example, enjoy the best health status in the world. Japan also has one of the smallest income gaps between its richest and poorest citizens.

In Canada, in 1994, about 75% of those earning more than \$60,000 in households of one or two felt they were in good or excellent health compared with just over half of similar households living on \$15,000 a year or less.

Education also plays its part. In 1994, nearly three-quarters of people with a college or university education reported excellent or very good



Photo by George Webber

health compared with less than 50% of those without a high school diploma.

Even the World Bank has observed that “economic policies conducive to sustained growth are among the most important measures governments can take to improve their citizens’ health.” A Canadian government report on the subject concluded that “being healthy requires a clean, safe environment, adequate income, meaningful roles in society, and good housing, nutrition, education and social support in our communities.”

## THE STAGES OF LIFE

On a typical day in Canada, slightly more than 1,000 babies are born. Nearly nine in 10 will be in good health and the vast majority will grow to be healthy adults. From here, the stages of life can roughly be identified as those of childhood and adolescence, adulthood and old age. While adolescence brings its own intriguing challenges and tragedies, most of us escape it unscathed to become contributing, healthy adults. Adulthood is then eventually succeeded by the so-called “golden years.” Almost three in four of Canada’s seniors would probably agree with this tag: they rate their health as anywhere from good to excellent.

### Childhood

The very high likelihood of having a healthy baby in Canada is the reward for much care and dramatic improvement in our health practices. Whereas in the 1920s, nearly 10% of Canadian babies died before their first birthday, today public health programs have virtually eliminated many of the diseases to which children fell victim in the past. About nine in 10 Canadian children are vaccinated against childhood diseases such as diphtheria, whooping cough, tetanus and polio. Most children receive

shots to ward off measles, although outbreaks of the disease among school-aged children in the 1990s have prompted some provinces to give children a second dose of the vaccine.

In 1995, Canada’s infant death rate dropped to 610 for every 100,000 live births. Some countries, such as Japan, Germany, France and the United Kingdom, have lower infant death rates, while the United States, New Zealand and Mexico actually have higher rates.

The overall health of Canadian babies is also improving. In 1994, half of all newborns weighed a robust 3,400 grams or more, up from 3,316 grams 20 years before.

Still, a minority of infants start life at a disadvantage. Of the nearly 1.4 million babies born between 1991 and 1995, one in 10 was born prematurely—after 258 or fewer days in the womb. About 6% of babies born in Canada in 1995 had a low birth-weight (2,500 grams or less at birth), a rate that has gradually improved since the 1970s, when it was close to 7%. Since 1990, the prevalence of low birth-weight babies seems to have increased, perhaps because more older women (who have a higher risk of having low birth-weight babies) are becoming mothers.

The first year of life is decidedly the most precarious. In 1995, for every 100,000 babies born in Canada, 610 did not make it to their first birthday. Of those, nearly three-quarters had birth defects or complications surrounding the birth (such as a pre-term birth). When more specific causes of death are considered, sudden infant death syndrome (SIDS) emerges as the leading cause of death among children under age one.

For one- to nine-year-olds, the death rate drops dramatically, to about 23 per 100,000. In 1993, four in 10 deaths in this age group were the result of external causes, such as car accidents. Cancer was the second biggest threat, responsible for 14% of deaths, and the consequences of birth defects accounted for 13% of deaths among boys and 10% among girls.



## *O h   N a t u r a l*

*Remedies in practices such as acupuncture, homeopathy and the use of herbal products are gradually being accepted in Canada both by physicians and patients. Surveys have shown a growing awareness and willingness by patients to seek alternate health services, and the medical establishment has slowly followed.*

*Formally, Canada supports the World Health Organization's view that medicinal plants play an important role in health care. But disagreement about the efficacy of natural health remedies in Canada was underscored in 1997 when new regulations*

*governing herbal products were delayed and finally cancelled. Instead, a parliamentary review was called to examine the entire subject from vitamin supplements and East Indian herbals to North American Native remedies and their usage in other countries.*

*Meanwhile, Canadian scientists have been putting garlic, wildflowers and even caterpillar fungus under the microscope. At Dalhousie University, pure extracts of Echinacea (a large purple-pink wildflower) were found to activate immune cells. At the University of Guelph, experiments showed*

*that processed garlic mixed with fish oil lowered blood cholesterol levels. At Queen's University, meanwhile, in 1997, garlic was found to reduce the effects of chemical poisons in the lungs of mice.*

*In Vancouver, the Tzu Chi Institute for Complementary and Alternative Medicine opened in 1996 to evaluate acupuncture, homeopathy and other treatments.*

*In Alberta, legislation passed in 1996 prohibits the medical profession from penalizing practitioners who use non-traditional therapies unless patients are put in danger. The Ontario College of Physicians*

*and Surgeons, the regulatory body governing the province's doctors, instituted a similar policy in 1997.*

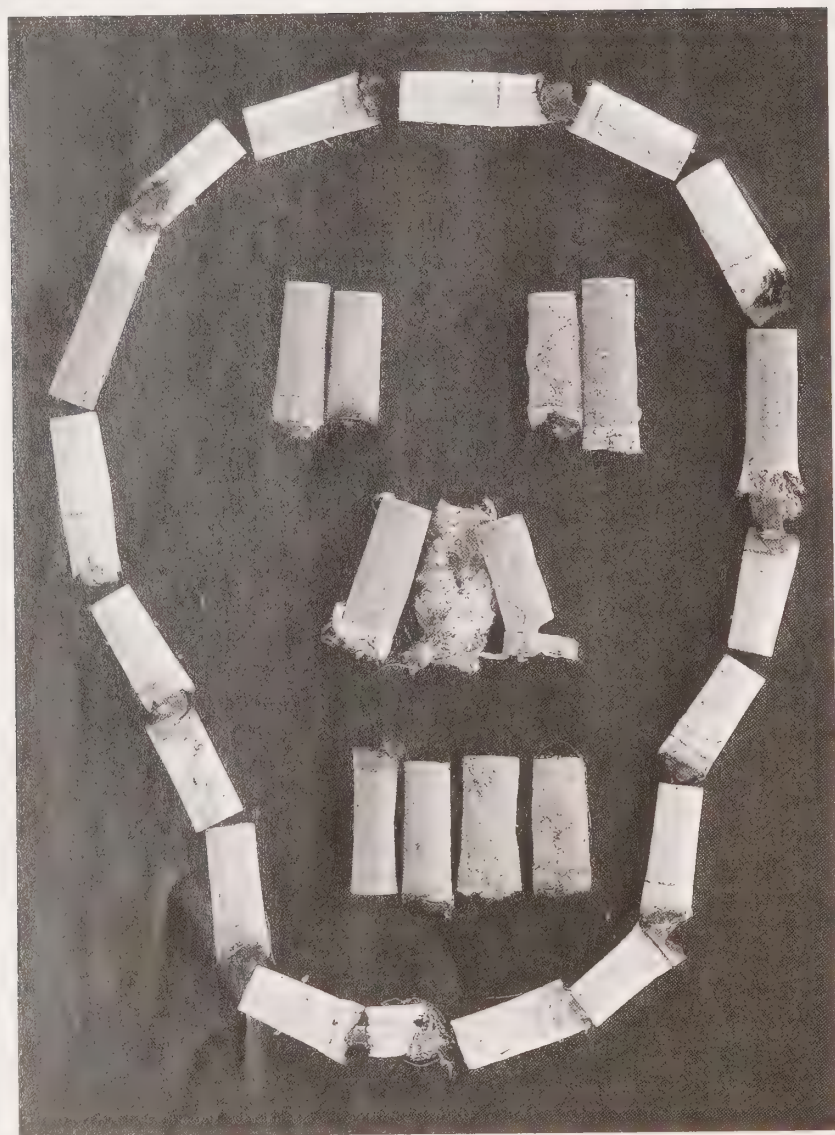
*Acupuncture, based on traditional Chinese medicine (T'chi, or life force energy), has been added to medical training at both McMaster University and the University of Alberta. The practice involves the application of needles to any number of 800 traditional acupuncture points.*

*More and more Canadians—mostly men and women with multiple ailments—are*

*turning to alternative health care. In 1994, some 15% of Canadians said they had consulted alternative practitioners, such as chiropractors (chosen by 11%), massage therapists and homeopaths (2% each), and acupuncturists (1%). In 1997, some 42% of Canadians surveyed by a national polling firm said they had used alternative treatments. British Columbians ranked highest at 56%.*

*The place of herbal remedies and alternative medicines has had a foothold in*

*the pantheon of medical treatment for millennia. Camomile has now been identified as one of the embalming ingredients used in the mumification of Rameses II of Egypt, and the Roman naturalist Pliny the Elder wrote 37 volumes on the medicinal uses of herbs in AD 77. The tall foxglove plant, which contains cardioactive agents, has been used for 200 years to treat heart failure.*



Work by Anna Banana

## The Young and the Reckless

Regardless of the generation, adolescence is a time of emotional turbulence, of testing limits and taking risks. For most Canadian youth, therefore, illness is less of a threat than are accidents or suicide.

About one-half of all deaths among children aged 10 to 14 are due to external causes, most commonly, car crashes. Among 15- to 19-year-olds, external causes account for nearly eight in 10 deaths among boys and seven in 10 among girls. In 1993, car accidents were the leading external cause of death, responsible for about four in 10 deaths among older teens.

Suicide is the second leading cause of death among teenagers aged 15 to 19. Between 1986 and 1990, 13 of every 100,000 young people in this age group killed themselves, accounting for nearly one-quarter of all teenage deaths.

Over the past 30 years, the suicide rate among 15- to 19-year-olds has increased nearly fivefold for males and threefold for females. Much of this increase is likely due to improved accuracy in reporting suicide as a cause of death, against a backdrop of more openness and less social and religious stigma. Experts have found that students who feel engaged in and appreciated by their school and community, and who have adequate life skills, are less likely to try to take their own lives.

A long-term study of substance abuse among Canadian teenagers, spanning a period of 18 years, found that between 1993 and 1995, after a decade of steady declines, there were significant increases in the number of Ontario students in Grades 7 and up who used tobacco and illegal drugs. The biggest increases were in the use of cannabis (marijuana and hashish) and hallucinogens such as mescaline and psilocybin ("magic mushrooms").

Over the two-year period, tobacco use in this age group jumped to 28%, the highest level since 1983. Because more than eight in 10 adult smokers pick up the habit before age 20, smoking in the teenage years can have serious consequences. In 1994, nearly one-third of all Canadian



19-year-olds were smokers and more than three-quarters of them smoked daily.

Teenagers take other risks as well. In 1994–95, only 8% of teenagers aged 15 to 19 wore a helmet when they rode a bicycle. Between 1980 and 1994, nearly six in 10 of the 1,665 bicyclists killed in Canada were under the age of 20, and almost two-thirds died of head injuries.

Similarly, in 1992, a British Columbia survey found that more than half of all 17-year-olds in the province were sexually active, but fewer than six in 10 had used a condom the last time they had sex.

Comparing the statistics on teen pregnancy in 1974 and 1994, there are many differences. Teen pregnancy rates are generally on the rise. In 1994, there were 48.8 pregnancies for every 1,000 women aged 15 to 19,

a rate not seen since the late 1970s. However, the number of live births to teenagers is down because the proportion of pregnancies ending in abortion is up. In fact, the proportion nearly doubled between 1974 and 1994: from 26% to 45%. The other big difference is that most teen mothers (81%) were single at the time they had the baby. In 1974, only one-quarter were single.

## Adulthood

Apart from the odd injury or bug, most Canadian adults are, on the whole, in good health. Many of us could, however, make changes to our lifestyles that would help us feel even better.



*Detail of a photo courtesy of National Archives of Canada, RD-902*

**A group of Canadian schoolchildren receiving vaccinations in the early 1940s.**

Smoking is widely acknowledged as the biggest preventable cause of illness and death in industrialized countries. In Canada, it has been estimated that smoking leads to nearly one in five deaths—more than deaths from suicide, vehicle crashes, AIDS and murder combined. Although tobacco use has declined since the 1970s, nearly 7 million Canadians—31% of Canadians over the age of 15—smoked in 1994, and most smoked every day.

Partly as a result of a lack of physical exercise, 46% of adults in Canada are at least somewhat overweight. In fact, nearly one-third of us are obese, to the point of probable health risk. Excess weight is linked to such conditions as circulatory disorders, cardiovascular disease, high blood pressure, sleep disturbances, certain cancers and diabetes.

In 1994–95, only 43% of adults were a healthy weight. At the same



Mother with her premature baby.

time, about 25% of women aged 20 to 24 were underweight, as were almost 10% of men in the same age group.

The proportion of Canadians claiming that nutrition is very important is up. In 1994, some 66% of us supported this idea, up from 59% five years earlier. In the past 20 years, Canadians have cut down on the consumption of red meat, butter and sweets and have begun to eat more high-fibre cereals, poultry, fish, low-fat proteins and fresh fruits and vegetables. Yet, only 43% of us (mostly women and the elderly) would rate our eating habits as very good to excellent.

## Seniors

In 1994, almost three in four seniors—those aged 65 and upwards—living at home rated their health as good to excellent. Even among people aged 85 and over, more than three in four rated their health as good or very good.

But the “golden years” do not arrive free of life’s scars. In 1994–95, three-quarters of Canadians aged 55 and over—4.3 million people in all—said they suffered from chronic pain or discomfort, and about one in six claimed that health conditions kept them from their daily activities. The most common health concerns were arthritis, rheumatism, back pain and high blood pressure.

Chronic ailments become more common with age. Since women generally live longer than men, they are also more likely to develop a physical disability sometime in their lives. For example, in 1994–95, some 38% of women aged 75 and older had at least one physical limitation, compared with 29% of men. In contrast, only one in 10 people aged 55 to 64, of either gender, experienced such long-term ailments.

The leading causes of death for seniors are diseases of the circulatory system, specifically, heart diseases. In 1993, circulatory diseases were responsible for more than four in 10 deaths among older men and nearly half of deaths among senior women.



By 2041, an estimated 23% of the population will be aged 65 and older, nearly double the proportion in 1995. As a result, there will likely be large numbers of people living with chronic disease. The aging baby boomers will no doubt place unprecedented stress on the health-care system.

## HEALTH MATTERS

As a nation, we have made great progress in eradicating some infectious diseases that once decimated the population. Medical breakthroughs have yielded treatments and vaccines which vastly increase the survival rate and prevent diseases. Still other ailments, such as cardiovascular disease, have been kept at bay through lifestyle changes such as the move towards healthier eating and more exercise. Sadly, though, relatively new diseases such as AIDS pose harrowing health threats, and we are actually losing ground in the battle against such diseases as melanoma, a serious form of skin cancer.

### Infectious Diseases

History tells us of the tragedy of the 19th century scourges, when smallpox epidemics, tuberculosis and cholera raged through Canadian cities and towns. Today, public health measures, sanitation, proper housing, immunization and antibiotics have virtually wiped out many of these infectious diseases. However, people remain vulnerable to viral and bacterial infections. In 1995, for example, nearly 7,400 Canadians died of pneumonia and influenza.

Tuberculosis remains a problem among newcomers to Canada, who accounted for nearly six in 10 of the 1,930 new cases of active tuberculosis

reported in 1995. (Nearly one-fifth of all active tuberculosis cases occur among Aboriginal peoples, largely because of crowded living conditions and poor nutrition resulting from low incomes.)

Acquired Immunodeficiency Syndrome (AIDS), meanwhile, remains incurable, even though medical science has created drug therapies that can delay the onset of symptoms among people infected with the Human



My life as a dog ...

Photo by Brett Lauthier



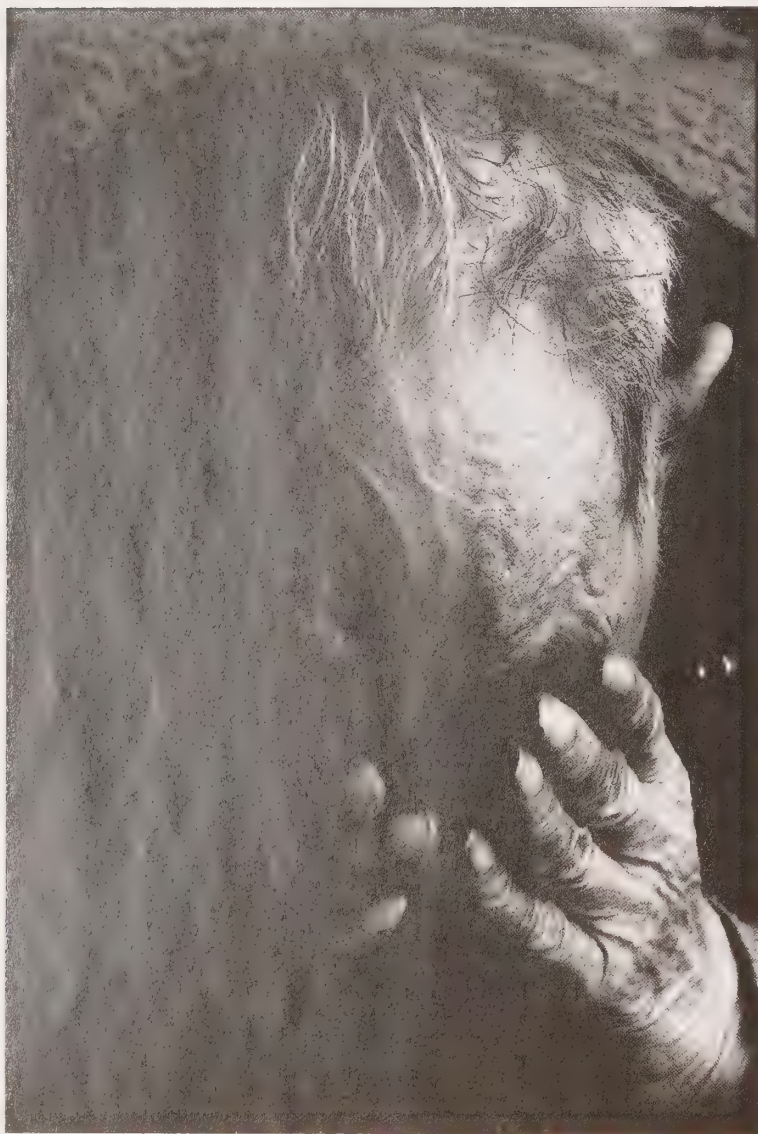


Photo by George Weibler

Homeless man.

Immunodeficiency Virus (HIV). Although the number of reported cases of HIV infection continues to climb, the number of AIDS-related deaths has been dropping gradually since 1993, when a total of 1,333 adults and children died of AIDS-related diseases. As of mid-1997, there had been 15,101 HIV-AIDS cases reported in Canada, all but 158 of them among adults. Since the disease was first diagnosed, there have been 11,046 deaths related to HIV-AIDS infection.

In Canada, men who have sex with men continue to be most at risk, representing two-thirds of all AIDS cases reported among males in 1997. However, the proportion of cases attributed to this group peaked in 1987–88, and has been decreasing ever since.

Meanwhile, AIDS cases attributed to needle sharing by intravenous drug users have increased: from 2% of cases diagnosed before 1992, to nearly 16% in 1996. In fact, in British Columbia, injection drug users now form the group with the highest number of new HIV infections.

Between 1987 and 1995, the number of HIV-AIDS cases attributed to heterosexual relations also climbed, from 3% to 19%. Indeed, AIDS is a growing health menace for women. Before 1993, there was one woman with AIDS for every 15 men so afflicted; by mid-1997, the proportion of women had doubled.

A few other infectious agents have sparked public fears since the mid-1990s, usually without much basis for concern. For example, necrotizing fasciitis, popularly known as the “flesh-eating disease,” is extremely rare. In a typical year, 90 to 150 cases come to light in Canada. Although the disease can be fatal in 20% to 30% of cases, the chances of contracting this infection and dying from it are literally one in a million. Creutzfeldt-Jakob disease, a fatal brain-degenerative condition thought to be linked to “mad cow disease,” is even rarer. Between 1979 and 1993, some 330 deaths in Canada were attributed to this malady; the majority of the deaths were among people over age 60.

## Cardiovascular Diseases

In less than 30 years, Canadians have managed to halve the death rate from cardiovascular diseases, mostly by quitting smoking, cutting dietary fat and controlling blood pressure. In addition, there have been improvements in the way doctors diagnose and treat heart conditions.

Even so, three-quarters of the adult population have at least one major risk factor for cardiovascular disease, which is the leading cause of death in Canada. In 1995, heart disease and stroke claimed about 79,000 lives, accounting for 36% of all deaths among men and 39% of deaths among women. Risk factors include high blood pressure, high blood-cholesterol levels, regular smoking and a sedentary lifestyle.

In 1995, cardiovascular disease was the most costly of diseases, requiring some \$7.3 billion in hospital care, physician services, prescriptions and research. With so many sufferers disabled for long periods, cardiovascular disease also cost another \$12.3 billion a year in lost productivity and potential earnings.

## Cancer

Cancer is the second most common cause of death in Canada and its incidence has been increasing steadily. In 1969, for example, for every 100,000 Canadian males, 332 had some form of cancer, and for every 100,000 females, 277. In 1996, an estimated 475 males out of 100,000 had cancer, as well as 341 females out of 100,000. Cancer occurs with greater frequency in older people: in fact, seven in 10 new cases in 1997 were expected to occur among people aged 60 and over.

The biggest cancer killer is lung cancer, which was expected to claim the lives of an estimated 10,600 men and 6,300 women in 1997. Among men, lung cancer rates levelled off in the mid-1980s and have since been in constant decline, due largely to a sharp drop in smoking rates among

## *The Cruellest Season*

*Year after year, with heart-stopping predictability, we are more likely to live through the summer and die in the winter.*

*In 1995, an average of 577 Canadians passed away every day, an average, however, that varied widely. In February, the numbers reached 635 on a typical day; in August, only 529. October, November, April and May hovered around the yearly average.*

*Winter is a time of poor ventilation and so colds and flu are common and can cause pneumonia among the frail and elderly. These alone are responsible for only a tiny fraction of deaths; they can, however, trigger death in those suffering from leading killers like heart disease.*

*Summer is a time of accidents, especially fatal car crashes. And yet, because collisions cause only 3% of all deaths, there's little impact on the overall pattern.*

*While it's popularly thought that the winter holiday season drives the sad and lonely to suicide, the haunting reality is that spring is the worst season for people likely to end their own lives.*



men beginning in the 1960s. Among women, however, lung cancer deaths have surely and decidedly risen over the past decade, but since 1969 have more than quadrupled.

Breast cancer remains by far the most frequently diagnosed form of cancer among women. In 1969, for every 100,000 Canadian females, 78 had breast cancer; by 1996, the rate had risen to 106 per 100,000 females. Although the rate of new breast cancer cases continues to rise by a

little over 1% per year, the death rate has been declining since 1986. In 1995, partly because of widespread mammography screening and improved treatment, breast cancer deaths reached their lowest level in more than four decades.

Certain other forms of cancer, meanwhile, are becoming less common. Stomach cancer rates are believed to be declining in recent decades because of improvements in diet, including a shift in favour of



From the Canadian AIDS Memorial Quilt, NAMES Project Canada (further details, see Appendix C).



fruits and vegetables over cured meats and salt-preserved foods. Cervical cancer rates are also declining, given better detection of abnormal, pre-cancerous cells.

On the other hand, melanoma, a serious form of skin cancer believed to be linked to overexposure to sun rays, is a growing health threat. Although melanoma represented only 2% of all cancers diagnosed in 1995, the rates since 1969 have increased fourfold for men and have almost doubled for women. In spite of public education messages warning of the risk of sun damage, less than half the population in 1996 made it a habit to use sunscreen, wear a hat or protective clothing, or seek shade.

Some attribute the increase of melanoma to the thinning of the ozone layer, a layer of gas in the Earth's upper stratosphere that has been depleted through the use of certain chemicals. These holes in the ozone layer have increased our exposure to ultraviolet rays, which can lead to skin cancer.

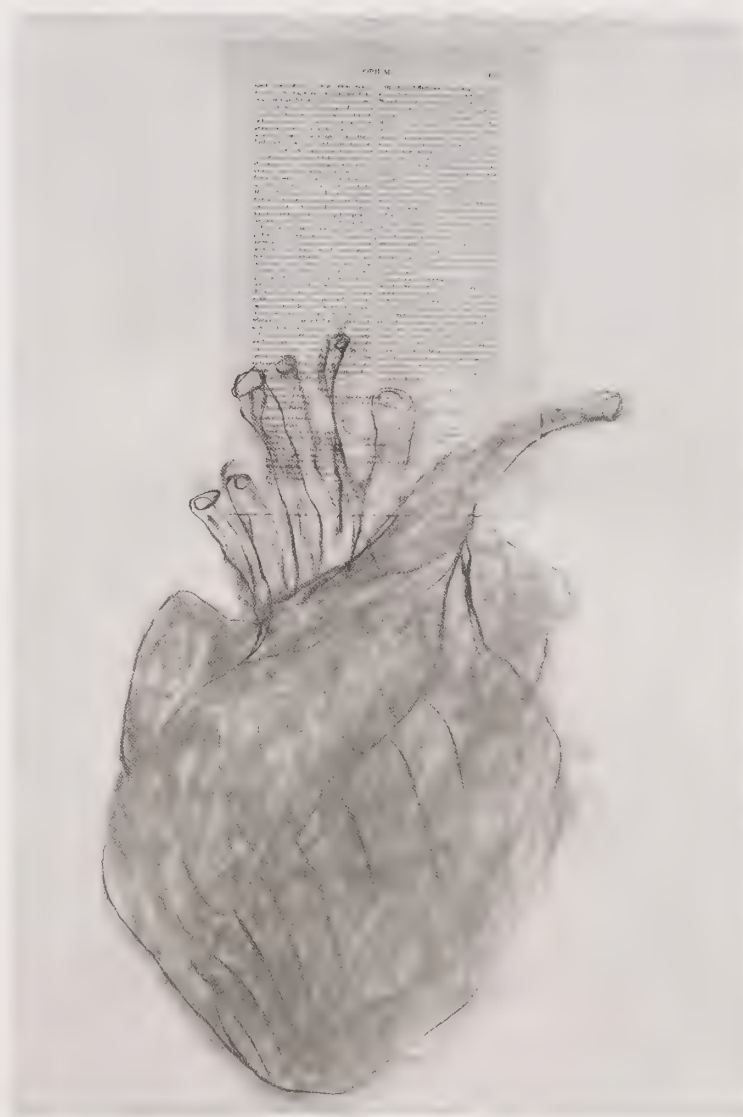
A comparison of cancer incidence rates from selected registries around the world shows differing geographic patterns of cancer. The ranking of common cancers in Canada is similar to those in the United States and Europe, but differs from those in South America, Asia and Africa.

For both Canada and the United States, lung, colorectal and prostate cancers are the top three cancers among men and lung, colorectal and breast cancer are the top three cancers among women.

However, Canadian incidence patterns are strikingly different from those in Japan and China where stomach, liver, and lung cancers are the top ranking cancers for men, and stomach, breast and colorectal cancers lead the list for women.

Some registries in South America and Africa have lung and colorectal cancer rates that rank much lower than Canadian rates. Instead, cervical cancer is the most common cancer among women in these registries.

Breast cancer is either the first or second most common cancer among women in all of the countries reported.



Work by Shelagh Keeley (further details, see Appendix C)

### ***Opium***

## THE HEALTH CARE SYSTEM

Throughout our lives, Canada's health care system forms a matrix of care that provides us with medical care and treatment when we need it and comfort—or palliative care—when we are dying. In most provinces, when someone is in need of medical care, one simply goes to the doctor of one's choice, who in turn bills the provincial government according to a fee schedule which has been negotiated between the provincial medical association and the provincial government.

Canada's health care system consists of 12 interlocking provincial and territorial plans. Federal contributions to each plan are governed by the principles of the Canada Health Act. In Canada, our government's emphasis, through Health Canada, is on fostering healthy individuals and families, and ultimately, a healthy society through disease prevention and health promotion initiatives.

### Hospitals

In 1996, Canadian hospitals spent \$25.7 billion, which represents one-third of total health-care spending. Although hospital spending increased steeply from \$5.4 billion in 1975, the proportion of annual health-care spending devoted to hospital care actually declined over this period, from 44% to 34%.

In 1986–87, hospital beds numbered 172,425. By 1994–95, the number of public hospitals had dropped 14% and the number of available beds had declined nearly one-third, to 120,774.

Hospital bed closures and increased day surgeries (where patients are not admitted for overnight stays) have helped hospitals survive rigorous budget cut-backs. In fact, over the past 25 years, while the population has

aged, hospitals have managed to hold average stays to a steady 11 to 12 days. Between 1986–87 and 1993–94, the number of people treated as out-patients increased 15%, while the number of days that in-patients spent in public hospitals declined 17%.

### Physicians

For most Canadians, seeing a doctor is a typical response to illness or injury. In 1994, the most common complaints were breathing disorders (including asthma and colds), followed by heart ailments, nerve conditions, psychiatric problems and bone and muscle pain. Although patients don't pay for doctor visits directly, the cost to the public health-insurance program amounted to \$11 billion in 1996.

In 1995, just over half of Canada's 55,000 physicians were in general practice or family medicine. Another 18,836 were specialists in clinical and laboratory fields, while 7,476 were surgeons.

The medicare system guarantees all Canadians equal access to medical care, regardless of their ability to pay, but our unique geography presents a challenge of its own. In the densely populated regions of the country along the Canada-U.S. border, in 1993, there were slightly fewer than 500 people for every doctor and nine of every 10 Canadians lived within five kilometres of a physician. In contrast, in the North (between the 65th and 69th parallels), there were nearly 4,000 people for every doctor and almost two-thirds of the population lived 100 kilometres or more from the nearest physician.

The number of people sharing the same physician also varies widely by specialty. In 1995, for example, there was only one genetics expert for every 1.2 million people. In comparison, there was, on average, one general practitioner for every 1,000 people.



*Photo by Ted Grant*

**Portrait of a doctor.**



## A Generous Heart

*More than 10,000 Canadians are enjoying longer, healthier lives because strangers donated their organs. In 1996, Canadian surgeons performed 1,578 transplants of kidneys, hearts, lungs and other organs.*

*Yet Canada has one of the lowest donation rates among western countries. More than 2,800 Canadians were waiting for organs at the end of 1996, and the list has been growing by more than 300 people each year since 1994. Between 1992 and 1996, more than 1,000 people are known to have died waiting for transplants.*

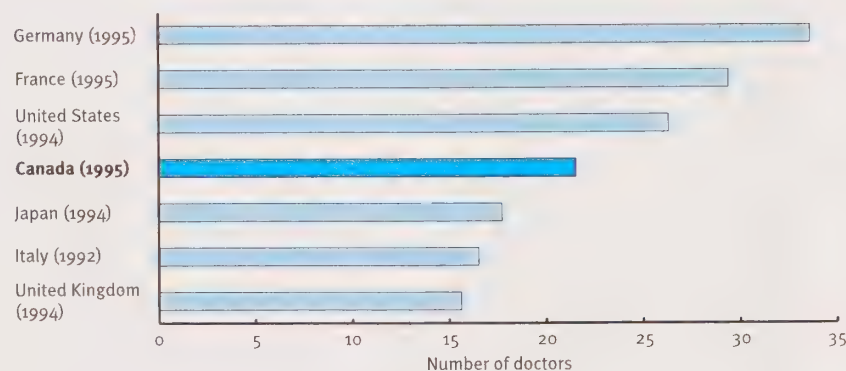
*In part, the shortage results from increased demand as our population ages. But Canada is hardly unique in this regard. What is different is that Canada, alone among advanced nations, lacks a co-ordinated national system for organ collection and distribution.*

## Nurses

In 1996, there were 264,305 registered nurses, nearly nine in 10 of whom worked in their field. This means that there was one practising nurse for every 127 people, a ratio almost identical to that of 10 years earlier. In fact, in 20 years, this ratio has only slightly declined: in 1976, it stood at one practising nurse for every 121 people.

The nursing profession has undergone extensive changes in the 1990s. While nurses in provinces such as Ontario continued to be laid off in 1997, other provinces began reporting nursing shortages in specialty fields such as critical care, intensive care and operating room care. In some provinces, nurses were taking on additional training and responsibility. At the same time, workers with less training, such as certified nursing assistants, licensed practical nurses, and personal-care workers, were assuming some of the traditional duties of nursing.

Number of doctors for every 10,000 people



Source: OECD Health Data 97, Organisation for Economic Co-operation and Development.

## *The Spirit of Life*

The following excerpt is from *Keeper'n Me*, a novel by award-winning Aboriginal writer Richard Wagamese.

*Keeper 'n Me* tells the story of Garnet Raven, an Ojibway Indian taken from his home at an early age and placed in a series of foster homes. Lonely, uprooted and in trouble with the law, he returns as a young adult to his Native family. Through Keeper, a community elder, Garnet learns of Aboriginal traditions and the redemptive powers of family, thereby rediscovering his roots and sense of self.

*What sticks with me most and what gets me through the rough times these days is Keeper'n me one morning in February, standing in knee-deep snow watching that*

*first light breaking over the horizon. It was a deep, deep February cold and the air was hardly moving at all. We could hear the trees snapping like they do when it gets real cold and every little motion of our clothing seemed amplified in that still morning air. There's real magic at that time of day. When the light starts creeping in and the world gets all purple around you and the air's as still as it was that day, it's like everything's vibrating with energy. Like it all has to work real hard just to hold itself together instead of erupting into a big celebration. It's a strong sense of magic. And when the colours start to break, all the pinks and blues and gold and orange and all them other colours they have no name for in English, well, it's*

*like you can hear them sizzle deep inside you and you start to feel a part of yourself start to sizzle too. Something deep, deep inside that takes mornings like that and opening yourself up to them to get to and feel.*

*"Feel that?" Keeper asked real soft that morning as we stood in that snow and watched that day break open.*

*"Yeah," I said, real quiet too. "Yeah, what is that?"*

*"S'Beedahbun," he said. "S'Beedahbun."*

*"First light?"*

*"Life," he said, very soft now and respectful. "Life. That's what you feel. Beedahbun's life."*

## PHARMACEUTICALS

In 1994, some 17.5 million people—more than three-quarters of the Canadian population over the age of 15—had used at least one prescription or over-the-counter medication in the previous month.

In 1996, Canadians spent nearly \$11 billion on prescription and non-prescription drugs as well as on personal health supplies. This included medications purchased in stores or dispensed through hospitals, other institutions, public-health programs such as immunization schemes, or by health professionals.

Unlike other health-care services, which are largely publicly funded, nearly 65% of these drug costs were borne by individuals and private health insurers. In fact, the private sector's share of the expenditures grew nearly 6% between 1995 and 1996, while the public sector's share shrank nearly 3%.

It is estimated that retail pharmacies dispensed about 235 million prescriptions for pharmaceuticals in 1996. Nearly four in 10 of these were prescribed to treat heart conditions, infections and mental disorders. Ranking next were painkillers and hormone therapies, followed by contraceptives and diabetes-related treatments.



## SOURCES

Canadian Fitness and Lifestyle Research Institute  
Canadian Institute for Health Information  
Health Canada  
Industry Canada  
National Institute of Nutrition  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Social Trends.** Quarterly. 11-008-XPE
- **Health Status of Canadians: Report of the 1991 General Social Survey.** 11-612E
- **Health Reports.** Quarterly. 82-003-XPB
- **Heart Disease and Stroke in Canada.** Biennial. 82-400-XPE
- **National Population Health Survey Overview.** Occasional. 82-567
- **Canadian Cancer Statistics.** Annual. 82F0008E
- **A Portrait of Seniors in Canada.** 1997. 89-519-XPE
- **Registered Nurses Management Data.** Annual. 84-526E

Selected publications from other sources

- **Canadian Journal of Public Health.** Canadian Public Health Association. Bimonthly.
- **Canadian Medical Association Journal.** Canadian Medical Association. Bimonthly.
- **National Health Expenditures in Canada, 1975-1994.** Health Canada. 1996.
- **Physical Activity and Lifestyles in Canada, 1981-1995.** Canadian Fitness and Lifestyle Research Institute. 1996.
- **Registered Nurses 1996 Statistical Highlights.** Canadian Nurses Association.
- **Reporting: a One-Year Report on the National Forum on Health.** National Forum on Health. 1995.

## Health

### Legend

– nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

(Certain tables may not add due to rounding)

### 4.1 Health Expenditures<sup>1</sup>

	1975	1980	1990	1991	1992	1993	1994	1995
\$ millions								
<b>Health expenditures</b>	<b>12,260.8</b>	<b>22,408.2</b>	<b>61,256.1</b>	<b>66,564.5</b>	<b>70,156.6</b>	<b>71,791.8</b>	<b>73,115.2</b>	<b>74,491.8</b>
Hospitals	5,514.3	9,399.2	24,051.2	25,919.4	26,882.6	26,977.8	26,757.8	26,460.5
Other institutions	1,124.3	2,536.2	5,720.5	6,316.0	6,834.2	6,859.6	6,982.5	7,256.4
Physicians	1,839.9	3,287.5	9,258.3	10,219.7	10,464.0	10,514.9	10,692.8	10,823.5
Other professionals	1,094.6	2,260.0	6,412.6	6,942.7	7,277.1	7,503.8	7,796.6	8,051.9
Drugs, prescribed and non-prescribed	1,076.2	1,881.5	6,905.5	7,673.6	8,451.7	8,897.0	9,078.9	9,303.9
Other expenditures	1,611.5	3,043.8	8,908.0	9,493.1	10,247.0	11,038.7	11,806.6	12,595.6
%								
<b>Expenditures as a percent of GDP</b>	<b>7.1</b>	<b>7.2</b>	<b>9.1</b>	<b>9.8</b>	<b>10.2</b>	<b>10.1</b>	<b>9.8</b>	<b>9.6</b>

1. Health expenditures include spending by federal, provincial and local governments, workers' compensation boards and the private sector.

Source: Canadian Institute for Health Information, *National Health Expenditure Trends, 1975-1997*.

#### 4.2 Per Capita Health Expenditures<sup>1</sup>

	1975	1980	1990	1991	1992	1993	1994	1995
	\$							
<b>Canada</b>	<b>528</b>	<b>911</b>	<b>2,204</b>	<b>2,367</b>	<b>2,458</b>	<b>2,480</b>	<b>2,499</b>	<b>2,515</b>
Newfoundland	474	920	—	2,032	2,088	2,109	2,183	2,244
Prince Edward Island	502	987	1,980	2,120	2,240	2,325	2,340	2,344
Nova Scotia	465	772	2,063	2,169	2,240	2,231	2,267	2,264
New Brunswick	409	794	2,060	2,176	2,229	2,279	2,344	2,407
Quebec	532	901	2,022	2,188	2,270	2,301	2,359	2,383
Ontario	534	873	2,298	2,501	2,589	2,594	2,606	2,633
Manitoba	532	937	2,280	2,376	2,482	2,525	2,572	2,638
Saskatchewan	487	857	2,265	2,352	2,349	2,319	2,355	2,401
Alberta	560	984	2,327	2,401	2,516	2,495	2,399	2,315
British Columbia	552	1,067	2,241	2,409	2,549	2,636	2,641	2,643
Yukon Territory	722	1,066	2,046	2,333	2,324	2,720	3,176	3,278
Northwest Territories	813	1,309	4,934	5,443	5,405	5,528	5,464	5,329

1. Health expenditures include spending by federal, provincial and local governments, workers' compensation boards and the private sector.

Source: Canadian Institute for Health Information, *National Health Expenditure Trends, 1975–1997*.

#### 4.3 Employment in Health and Social Services

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>All industries<sup>2</sup></b>	<b>10,591.6</b>	<b>10,815.9</b>	<b>10,907.4</b>	<b>11,204.3</b>
<b>Health and social services</b>	<b>1,169.0</b>	<b>1,212.4</b>	<b>1,199.4</b>	<b>1,207.7</b>
Institutional health and social services, non-institutional social services	891.6	914.1	890.9	880.6
Hospitals	558.5	546.8	534.6	519.8
Other institutional health and social services	213.7	237.7	223.4	222.1
Non-institutional social services	119.4	129.5	132.9	138.7
Other health and social services	277.4	298.3	308.5	327.0
Non-institutional health services	44.0	51.5	57.3	76.7
Offices of physicians, surgeons and dentists	123.8	129.7	131.7	133.9
Offices of other health practitioners	27.2	35.1	35.4	39.3
Offices of social services practitioners	2.5	2.5	2.9	3.4
Medical and other health laboratories	24.0	21.8	21.2	19.8
Health and social services associations and agencies	55.9	57.6	60.0	54.0

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72F0002-XDE.



4.4 Earnings<sup>1</sup> in Health and Social Services, by Industry Group

	1994	1995	1996	1997
	Average weekly earnings <sup>2</sup> \$			
<b>All industries<sup>3</sup></b>	<b>557.94</b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>
<b>Health and social services</b>	<b>498.28</b>	<b>504.28</b>	<b>502.98</b>	<b>509.81</b>
Institutional health and social services, non-institutional social services	511.70	514.45	513.81	520.62
Hospitals	571.00	575.15	579.99	585.30
Other institutional health and social services	417.67	424.11	425.84	438.61
Non-institutional social services	384.16	392.19	395.87	398.35
Other health and social services	454.85	471.62	469.81	478.60
Non-institutional health services	503.00	506.72	507.18	513.99
Offices of physicians, surgeons and dentists	423.84	448.52	443.81	454.79
Offices of other health practitioners	364.65	365.91	372.17	390.96
Offices of social services practitioners	607.39	520.33	524.39	537.74
Medical and other health laboratories	510.13	521.68	536.86	553.24
Health and social services associations and agencies	507.33	522.88	526.57	519.52

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72-002-XPB.

4.5 Health Care Beds,<sup>1</sup> All Institutions, 1993-94

	Total <sup>2</sup>	Short-term	Rehabilitation	Extended care	Other long-term	Minimal care	Self-sufficient
	Number of approved beds per 1,000 population <sup>3</sup>						
<b>Canada</b>	<b>13.6</b>	<b>3.6</b>	<b>0.2</b>	<b>2.6</b>	<b>3.2</b>	<b>1.5</b>	<b>1.2</b>
Newfoundland	13.0	4.3	0.1	4.4	0.8	2.4	1.1
Prince Edward Island	21.4	4.9	0.1	6.1	3.9	4.3	2.0
Nova Scotia	14.9	4.2	0.1	0.7	6.0	2.9	1.0
New Brunswick	17.3	4.7	0.1	4.2	2.9	3.5	2.0
Quebec <sup>4</sup>	13.1	3.8	0.2	2.7	0.8	—	—
Ontario	13.0	3.3	0.3	2.3	4.0	2.0	1.2
Manitoba	16.8	4.5	0.1	7.7	2.4	0.7	1.4
Saskatchewan	16.3	4.6	—	3.6	5.5	1.2	1.4
Alberta	15.1	4.3	0.1	0.3	4.9	1.8	3.8
British Columbia	12.3	2.6	0.1	3.0	3.7	1.8	1.1
Yukon Territory	9.6	3.9	—	1.8	—	0.3	3.6
Northwest Territories	7.3	1.4	—	0.5	0.8	2.1	2.5

1. Beds are beds approved for the facility by the provincial authorities at the end of the reporting year. Includes only the facilities that were in operation for the entire fiscal year and that reported beds in the Annual Hospital and Residential Care Survey.

2. Only facilities with four or more beds are included.

3. Population is based on October 1 estimates for each fiscal year.

4. Quebec residential care facilities are not classified by type of care. As a result, total beds for Canada will not equal the sum of beds by type of care.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

#### 4.6 Fertility Rate<sup>1</sup>

	15–19 years <sup>2</sup>	20–24 years	25–29 years	30–34 years	35–39 years	40–44 years	45–49 years <sup>3</sup>
	Rate per 1,000						
1961	56.3	227.5	214.3	141.9	79.5	27.9	2.3
1966	46.7	164.6	159.7	101.1	56.3	18.7	1.7
1971	38.9	131.2	138.9	75.7	32.9	9.2	0.6
1976	33.0	104.5	126.4	63.8	20.9	4.3	0.3
1981	25.9	91.4	123.2	66.7	19.1	3.1	0.2
1986	23.0	78.7	119.0	72.5	22.3	3.1	0.1
1991	26.0	77.5	120.3	83.6	28.3	3.9	0.2
1992	25.7	75.0	119.3	85.3	28.9	4.2	0.1
1993	24.9	73.0	114.7	84.9	29.5	4.4	0.2
1994	25.1	72.2	114.0	86.0	30.4	4.7	0.1
1995	24.5	70.5	109.7	86.8	31.3	4.8	0.2

1. Age-specific fertility rates are calculated by dividing the number of live births in each age group by the total female population (in thousands) in each age group.

2. Births to women aged 14 and under are included in the 15–19 age group.

3. Births to women aged 50 and over are included in the 45–49 age group.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

#### 4.7 Suicides

	1995	1996	1981	1991	1995	1996
	Number of suicides			Suicide rate per 100,000 population		
<b>All ages</b>	<b>3,970</b>	<b>3,941</b>	<b>14.0</b>	<b>13.3</b>	<b>13.4</b>	<b>13.2</b>
<b>Male</b>	<b>3,158</b>	<b>3,093</b>	<b>21.3</b>	<b>21.6</b>	<b>21.5</b>	<b>20.8</b>
<b>Female</b>	<b>812</b>	<b>848</b>	<b>6.8</b>	<b>5.3</b>	<b>5.4</b>	<b>5.6</b>
1–14	43	41	0.7	0.6	0.8	0.7
Male	22	32	1.0	0.7	0.8	1.1
Female	21	9	0.4	0.4	0.8	0.3
15–19	264	231	12.7	13.8	13.3	11.5
Male	217	190	21.2	23.0	21.4	18.5
Female	47	41	3.8	4.0	4.9	4.2
20–24	339	350	19.6	18.2	16.6	17.2
Male	290	300	33.2	31.7	27.9	29.0
Female	49	50	5.9	4.1	4.9	5.0
25–44	1,832	1,770	17.4	18.1	18.6	17.9
Male	1,486	1,390	26.2	28.8	29.9	24.7
Female	346	380	8.6	7.6	7.1	8.6
45–64	1,058	1,060	20.1	16.2	17.1	16.6
Male	806	786	28.6	25.7	26.1	24.7
Female	252	274	11.9	6.9	8.1	8.6
65+	432	489	18.3	14.2	12.1	13.4
Male	335	395	30.4	26.3	22.3	25.6
Female	97	94	9.2	5.6	4.7	4.5
Not stated	2	—	—	—	—	—
Male	2	—	—	—	—	—
Female	—	—	—	—	—	—

Source: Statistics Canada, Catalogue no. 82-221-XDE.

4.8 Long-Term Limitation of Activity,<sup>1</sup> 1994-1995

	Population estimate	Any limitation or handicap	Limited at home	Limited at school <sup>2</sup>	Limited at work <sup>2</sup>	Primary condition responsible for limitation <sup>3</sup>					
						Nervous system	Back	Limb	Respiratory/digestive	Arthritis	Heart
	(thousands)	%		%					%		
<b>Total age 12+</b>	<b>4,743</b>	<b>20</b>	<b>5</b>	<b>8</b>	<b>13</b>	<b>17</b>	<b>16</b>	<b>12</b>	<b>10</b>	<b>11</b>	<b>9</b>
Male	2,236	20	4	8	11	17	18	14	10	8	10
Female	2,506	21	5	7	14	17	15	10	10	15	8
Age 12-14	112	8	6	2	3	26	3	11	33	3	1
Male	56	8	5	2	4	30	2	8	31	5	1
Female	55	10	6	2	3	22	3	15	36	2	1
Age 15-19	235	14	7	4	5	25	8	16	21	4	2
Male	118	14	6	4	4	31	6	11	15	5	2
Female	117	13	8	4	6	18	10	21	26	2	2
Age 20-24	208	12	4	5	5	20	15	18	20	3	1
Male	98	10	3	4	4	20	11	26	23	1	2
Female	110	13	5	5	6	19	18	11	18	4	1
Age 25-44	1,439	16	3	7	8	21	25	15	9	5	3
Male	700	16	2	7	7	22	26	19	7	4	3
Female	738	16	4	8	10	20	23	10	11	6	2
Age 45-64	1,462	25	2	11	16	15	20	10	8	13	1
Male	714	24	2	12	15	15	24	3	8	8	13
Female	747	26	3	9	17	15	17	8	8	19	8
Age 65-74	728	36	2	8	28	11	8	8	8	21	18
Male	330	37	4	11	27	12	9	8	9	16	18
Female	398	35	—	2	28	10	7	8	7	25	17
Age 75+	559	46	—	8	36	14	5	10	8	19	18
Male	219	44	—	10	34	9	6	12	12	13	20
Female	340	48	—	6	38	18	5	9	4	22	17

1. Percentage of Canadians reporting that they are limited in their normal activities at home, school or work for a period lasting at least six months.

2. As a percentage of those attending school or employed, respectively.

3. Percentages represent most common conditions and do not total 100% of the total population with long-term limitations or handicaps.

Source: National Population Health Survey Public Use Microdata Files, 1994-95.



4.9 Mortality Rates<sup>1</sup> by Causes

	1990			1992			1993			1994		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Rate per 100,000 population											
<b>All causes</b>	<b>704</b>	<b>919</b>	<b>542</b>	<b>678</b>	<b>885</b>	<b>524</b>	<b>687</b>	<b>891</b>	<b>535</b>	<b>675</b>	<b>871</b>	<b>529</b>
Malignant neoplasms	192	247	153	190	244	153	189	241	154	188	239	154
Intestine, except rectum	22	26	18	21	26	17	20	25	17	20	25	16
Lung	50	80	28	50	77	30	51	77	32	50	75	32
Breast	0	0	31	0	0	30	0	0	29	0	0	30
All other malignant neoplasms	120	141	76	119	140	76	118	139	76	118	139	76
Diabetes	15	18	13	15	18	14	17	19	15	17	20	14
Diseases of the heart	202	269	150	191	257	141	190	256	140	184	245	138
Ischaemic heart diseases	161	220	115	150	208	106	150	207	106	143	197	102
All other heart diseases	41	49	35	41	49	35	41	49	35	41	48	36
Cerebrovascular diseases	52	58	47	50	54	46	51	56	47	49	54	45
Atherosclerosis	8	9	8	7	8	6	7	7	6	6	7	6
Respiratory diseases	60	91	41	57	86	40	60	88	43	59	86	43
Pneumonia and influenza	25	34	20	23	31	18	23	30	19	23	31	19
Bronchitis, emphysema and asthma	8	12	6	7	11	5	7	11	5	7	10	5
All other respiratory diseases	27	45	16	28	44	17	30	47	19	29	46	19
Chronic liver diseases and cirrhosis	8	12	5	7	11	5	8	11	5	7	11	4
Congenital anomalies	5	5	5	4	5	4	4	4	4	4	5	4
Perinatal mortality, excluding stillbirths	4	5	4	4	4	3	4	4	3	4	4	4
Accidents and adverse effects	47	69	27	46	67	26	47	67	27	44	65	25
Motor vehicle accidents	14	20	8	12	17	7	12	17	8	11	16	6
Suicide	12	20	5	13	21	5	13	21	5	13	21	5
Homicide	2	3	1	2	3	1	2	3	1	2	2	1
Other accidents and adverse effects	19	27	12	19	26	12	19	27	12	19	26	12
Other causes	111	137	91	108	133	88	111	137	91	112	136	92

1. Rates are age-standardized using the 1991 population for Canada.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

4.10 Infant Mortality Rates<sup>1,2</sup>

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	Rate per 1,000 live births												
1975	13.7	17.3	19.2	16.2	15.5	11.8	12.8	15.1	17.8	14.9	14.4	24.5	35.7
1976	13.0	15.6	14.4	13.8	14.2	11.7	12.4	15.6	14.3	14.3	13.8	22.3	34.7
1977	12.4	10.3	18.8	11.6	13.4	12.4	11.3	16.6	15.1	11.1	13.5	13.9	29.4
1978	12.0	13.4	7.6	11.9	11.8	11.8	11.4	13.7	14.3	11.4	12.7	11.2	23.3
1979	10.9	11.4	10.9	11.9	11.4	10.5	10.3	13.0	11.5	11.4	11.3	16.0	27.3
1980	10.5	11.8	11.2	10.9	10.9	9.8	9.5	11.5	11.3	12.6	11.0	18.9	22.3
1981	9.6	10.8	13.2	11.5	10.9	8.5	8.8	11.9	11.8	10.6	10.2	14.9	21.5
1982	9.1	10.8	7.8	8.6	10.5	8.8	8.3	9.1	10.5	9.8	9.9	20.9	16.1
1983	8.5	10.6	8.4	9.3	10.7	7.7	8.0	10.4	10.1	8.4	8.8	18.5	20.8
1984	8.1	9.2	8.2	7.8	7.8	7.3	7.6	8.7	9.4	9.6	8.6	13.5	17.3
1985	8.0	11.8	4.0	7.9	9.6	7.3	7.3	9.9	11.0	8.0	8.1	10.8	16.7
1986	7.9	8.5	6.7	8.4	8.3	7.1	7.2	9.2	9.0	9.0	8.5	24.8	18.6
1987	7.3	7.9	6.7	7.4	7.0	7.1	6.6	8.4	9.1	7.5	8.6	10.5	12.5
1988	7.2	10.9	7.1	6.5	7.2	6.5	6.6	7.8	8.3	8.3	8.4	5.8	10.3
1989	7.1	9.1	6.2	5.8	7.1	6.8	6.8	6.6	8.1	7.5	8.2	4.2	16.2
1990	6.8	10.3	6.0	6.3	7.2	6.2	6.3	8.0	7.6	8.1	7.5	7.2	12.0
1991	6.4	7.8	6.9	5.7	6.1	5.9	6.3	6.4	8.2	6.7	6.5	10.6	12.2
1992	6.1	7.1	1.6	6.0	6.3	5.4	5.9	6.8	7.3	7.2	6.2	3.8	16.7
1993	6.3	7.8	9.1	7.1	7.2	5.7	6.2	7.1	8.1	6.7	5.7	7.9	9.6
1994	6.3	8.2	6.4	6.0	5.4	5.6	6.0	7.0	8.9	7.4	6.3	2.3	14.6
1995	6.1	7.9	4.6	4.9	4.8	5.5	6.0	7.6	9.1	7.0	6.0	12.8	13.0

1. The infant mortality rate is calculated as the number of deaths of children less than one year of age per 1,000 live births.

2. The totals for Newfoundland are estimated for 1975 through 1981 and for 1985 through 1990.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

## 4.11 Chances of Dying, International Comparisons, 1993

	Age	Life expectancy at age x	Survivors to age x out of 100,000 at birth	Infectious and parasitic diseases	Malignant neoplasms	Diseases of the circulatory system	Heart diseases	Cerebro-vascular diseases	Diseases of the respiratory system	Injury and poisoning	Motor vehicle traffic accidents
	years		number								
Canada	0	74.8	100,000	7.2	268.7	400.4	296.9	68.1	107.7	55.5	12.5
	1	74.3	99,312	7.2	270.5	403.1	298.9	68.6	108.3	55.6	12.5
	15	60.5	98,935	7.2	271.0	404.4	299.9	68.8	108.5	54.0	11.9
	45	32.4	94,839	7.2	277.8	417.4	309.3	71.1	112.6	34.0	5.7
	65	15.8	80,597	7.3	260.8	431.0	314.1	77.2	125.0	25.3	3.6
Sweden	0	74.5	100,000	7.5	216.3	501.8	361.8	89.7	88.4	53.4	7.2
	1	74.9	99,459	7.4	217.5	504.4	363.7	90.2	88.7	53.7	7.2
	15	61.1	99,154	7.4	217.7	505.8	364.7	90.4	88.9	52.7	6.9
	45	32.5	96,045	7.2	220.5	517.8	373.4	92.4	91.0	38.6	3.6
	65	15.6	82,940	7.2	208.2	555.9	382.3	98.4	100.2	27.1	2.6
Australia	0	75.1	100,000	7.6	270.8	444.2	318.9	87.2	93.0	47.7	12.0
	1	74.6	99,329	7.5	272.6	447.2	321.0	87.8	93.5	47.8	12.1
	15	60.9	98,924	7.4	273.1	448.9	322.2	88.2	93.7	46.1	11.5
	45	32.7	95,092	7.3	278.5	462.6	331.6	91.2	96.7	27.4	5.2
	65	15.8	81,771	7.5	260.3	481.0	338.5	99.4	103.4	19.3	3.4
Greece <sup>1</sup>	0	75.2	100,000	6.9	241.2	482.2	296.2	165.1	62.0	49.2	24.4
	1	74.8	99,186	6.9	243.2	486.1	298.6	166.4	62.4	49.4	24.6
	15	61.0	98,865	6.8	243.4	487.7	299.5	167.0	62.6	48.0	23.8
	45	32.9	94,890	6.7	247.0	500.3	306.4	172.4	63.8	29.1	12.1
	65	16.2	81,343	6.8	225.5	519.7	308.6	188.5	68.4	20.2	7.6
Italy <sup>2</sup>	0	74.0	100,000	3.6	286.8	415.5	241.0	119.9	77.5	54.4	19.4
	1	73.7	99,114	3.6	289.3	419.1	243.1	121.0	78.0	54.7	19.5
	15	59.9	98,738	3.5	289.6	420.4	243.8	121.3	78.1	53.6	18.9
	45	31.9	94,459	3.3	296.3	434.0	250.9	125.7	80.9	37.6	10.1
	65	15.5	79,356	3.1	269.6	460.1	258.1	138.6	90.1	30.8	7.0
United Kingdom <sup>2</sup>	0	74.1	100,000	4.8	265.1	440.8	315.8	86.8	148.5	33.5	6.9
	1	73.6	99,311	4.7	267.0	443.7	317.9	87.4	149.3	33.6	7.0
	15	59.8	98,976	4.5	267.3	445.0	318.9	87.6	149.5	32.6	6.5
	45	31.3	95,625	4.1	271.2	455.0	325.8	89.7	153.1	19.1	3.0
	65	14.7	80,421	3.7	255.2	460.2	321.4	97.1	170.1	13.3	2.1
France	0	73.8	100,000	13.1	304.9	310.3	195.5	75.1	84.4	85.2	16.3
	1	73.3	99,254	13.0	307.2	312.5	196.9	75.6	84.8	85.6	16.4
	15	59.6	98,866	13.0	308.0	313.6	197.6	75.9	85.1	84.8	16.0
	45	32.0	93,286	13.3	318.5	327.4	206.1	79.3	89.1	62.8	7.3
	65	16.2	76,829	14.0	290.8	354.5	220.8	88.0	100.9	52.3	4.5
New Zealand	0	73.3	100,000	5.4	264.0	449.4	324.8	84.3	114.3	55.5	17.8
	1	72.9	99,218	5.4	266.1	452.9	327.3	84.9	114.9	55.3	17.9
	15	59.2	98,806	5.3	266.6	454.7	328.6	85.3	115.2	53.2	17.2
	45	31.4	93,946	5.1	273.6	470.5	339.3	88.6	120.2	26.1	5.9
	65	15.0	78,726	4.8	255.6	480.2	337.0	97.7	134.8	18.6	4.5



## 4.11 Chances of Dying, International Comparisons, 1993 (concluded)

	Age	Life expectancy at age x	Survivors to age x out of 100,000 at birth	Infectious and parasitic diseases	Malignant neoplasms	Diseases of the circulatory system	Heart diseases	Cerebro-vascular diseases	Diseases of the respiratory system	Injury and poisoning	Motor vehicle traffic accidents
	years		number								
United States <sup>2</sup>	0	72.3	100,000	13.0	244.2	426.7	333.5	57.2	99.9	64.6	16.1
	1	72.0	99,062	12.9	246.5	430.5	336.5	57.7	100.5	64.9	16.2
	15	58.3	98,553	12.9	247.4	432.6	338.1	58.0	100.9	63.4	15.6
	45	31.1	92,212	12.7	258.4	454.2	353.1	61.0	106.4	35.5	7.5
	65	15.5	74,720	12.5	244.4	472.1	365.2	67.0	118.8	25.9	5.0
Mexico	0	70.1	100,000	42.8	116.5	282.6	181.3	66.0	112.7	104.4	24.4
	1	70.5	98,039	41.4	118.7	288.0	184.7	67.3	111.6	106.0	24.9
	15	57.2	96,976	41.2	119.6	290.9	186.6	67.9	112.4	104.5	24.3
	45	30.6	89,038	41.5	125.8	310.2	198.8	72.7	120.0	69.3	15.9
	65	15.5	70,588	40.4	127.5	335.8	213.4	80.1	137.1	47.9	10.8

1. 1994.

2. 1992.

Source: World Health Organization, *World Health Statistics Annual, 1995*, Geneva, 1996.4.12 Potential Years of Life Lost,<sup>1</sup> by Cause of Death, 1996

	Total all causes	Neoplasms	Accidental deaths	Suicides	Perinatal mortality	Congenital anomalies	Respiratory diseases	Diseases of the heart	Cerebrovascular diseases	Other causes
	years									
All ages	1,043,952	310,468	195,229	110,210	818	14,699	31,167	138,813	25,604	216,947
1-4 years	30,887	4,690	9,849	—	603	4,556	2,144	1,005	201	7,839
5-9 years	18,563	3,688	9,375	63	63	1,188	438	375	63	3,313
10-14 years	19,493	3,565	6,498	2,300	—	1,898	518	633	115	3,968
15-19 years	55,073	3,360	29,190	12,128	105	1,050	525	1,470	368	6,878
20-24 years	64,220	4,893	30,020	16,625	48	998	903	1,188	380	9,168
25-29 years	63,920	6,715	22,865	14,790	—	1,148	1,275	2,678	850	13,600
30-34 years	87,075	12,225	24,675	15,713	—	788	1,350	4,725	1,538	26,063
35-39 years	101,400	22,263	20,248	17,030	—	943	1,755	8,548	2,080	28,535
40-44 years	112,915	34,898	16,473	13,173	—	468	2,145	13,805	3,025	28,930
45-49 years	117,990	45,900	11,025	8,978	—	743	2,993	19,643	3,218	25,493
50-54 years	116,760	51,450	7,438	5,338	—	368	3,955	23,450	3,938	20,825
55-59 years	109,788	51,150	4,050	2,538	—	313	4,488	25,275	3,700	18,275
60-64 years	96,855	44,730	2,580	1,148	—	188	5,325	23,453	3,735	15,698
65-69 years	49,015	20,943	945	390	—	55	3,355	12,568	2,395	8,365

1. Potential years of life lost are calculated by taking the median age in each age group, subtracting from 70, and multiplying by the number of deaths in that age group disaggregated by sex and cause of death.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

## 4.13 Life Expectancy at Birth

	Both sexes	Males	Females	Difference
	years			
<b>Canada</b>				
1920-22	59	59	61	2
1930-32	61	60	62	2
1940-42	65	63	66	3
1950-52	69	66	71	5
1960-62	71	68	74	6
1970-72	73	69	76	7
1980-82	75	72	79	7
1990-92	78	75	81	6
<b>1990-92</b>				
Newfoundland	77	74	80	6
Prince Edward Island	77	73	81	8
Nova Scotia	77	74	80	7
New Brunswick	78	74	81	7
Quebec	77	74	81	7
Ontario	78	75	81	6
Manitoba	78	75	81	6
Saskatchewan	78	75	82	6
Alberta	78	75	81	6
British Columbia	78	75	81	6

Source: Statistics Canada, Catalogue no. 82-221-XDE.

4.14 Cases of Notifiable Diseases<sup>1</sup>

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	number of cases									
<b>AIDS</b>	<b>634</b>	<b>801</b>	<b>1,118</b>	<b>1,050</b>	<b>1,014</b>	<b>1,330</b>	<b>1,206</b>	<b>1,156</b>	<b>1,266</b>	<b>919</b>
Male	597	749	1,043	1,004	952	1,249	1,129	1,068	1,165	815
Female	37	52	75	46	62	81	77	88	101	104
<b>Gonococcal infections</b>	<b>27,918</b>	<b>20,736</b>	<b>19,110</b>	<b>13,822</b>	<b>12,457</b>	<b>9,253</b>	<b>6,832</b>	<b>6,167</b>	<b>5,303</b>	<b>5,023</b>
Male	14,755	10,682	10,278	7,681	3,986	5,148	3,738	3,478	3,064	2,845
Female	12,923	9,834	8,778	6,024	3,078	4,093	3,086	2,645	2,234	2,168
<b>Gonococcal ophthalmia</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>14</b>	<b>5</b>	<b>15</b>	<b>17</b>
Male	1	1	-	2	3	3	5	-	7	7
Female	2	1	1	2	1	1	9	5	8	10
<b>Syphilis</b>	<b>2,376</b>	<b>1,583</b>	<b>1,497</b>	<b>1,444</b>	<b>1,429</b>	<b>1,174</b>	<b>872</b>	<b>679</b>	<b>581</b>	<b>799</b>
Male	1,483	991	862	840	236	668	442	353	312	435
Female	869	588	627	586	144	503	396	308	269	363
<b>Campylo-bacteriosis</b>	<b>10,415</b>	<b>11,098</b>	<b>11,602</b>	<b>11,817</b>	<b>12,741</b>	<b>12,392</b>	<b>13,437</b>	<b>15,723</b>	<b>13,680</b>	<b>12,801</b>
Male	2,049	2,834	2,759	6,048	3,504	6,493	6,964	8,145	7,086	6,816
Female	1,720	2,579	2,496	5,712	3,123	5,846	6,445	7,533	6,557	5,936
<b>Chicken pox<sup>2</sup></b>	<b>52,957</b>	<b>42,312</b>	<b>41,560</b>	...	...	...	<b>50,836</b>	<b>40,582</b>	<b>41,855</b>	<b>20,848</b>
Male	11,496	6,948	7,912	...	...	...	8,409	5,586	6,244	4,441
Female	11,195	6,728	7,728	...	...	...	8,141	5,217	5,639	4,122
<b>Giardiasis</b>	<b>9,109</b>	<b>9,075</b>	<b>9,543</b>	<b>8,786</b>	<b>9,168</b>	<b>7,486</b>	<b>7,063</b>	<b>6,523</b>	<b>6,304</b>	<b>6,070</b>
Male	2,579	2,648	2,617	4,493	2,761	3,963	3,923	3,497	3,433	3,228
Female	2,216	2,290	2,426	4,229	2,619	3,497	3,117	3,009	2,860	2,823
<b>Hepatitis A</b>	<b>1,130</b>	<b>1,533</b>	<b>1,854</b>	<b>1,939</b>	<b>3,020</b>	<b>2,689</b>	<b>1,825</b>	<b>1,712</b>	<b>2,108</b>	<b>2,605</b>
Male	381	622	757	1,157	1,308	1,737	1,039	964	1,262	1,605
Female	313	450	557	770	691	938	780	738	832	987
<b>Hepatitis B</b>	<b>3,005</b>	<b>3,132</b>	<b>3,456</b>	<b>3,001</b>	<b>2,683</b>	<b>2,814</b>	<b>2,762</b>	<b>3,079</b>	<b>3,034</b>	<b>2,385</b>
Male	1,396	1,461	1,748	1,899	1,430	1,805	1,724	1,763	1,733	1,443
Female	739	852	965	1,052	742	983	1,024	1,301	1,287	928
<b>Hepatitis C<sup>3</sup></b>	...	...	...	...	...	...	...	...	...	<b>15,827</b>
Male	...	...	...	...	...	...	...	...	...	9,971
Female	...	...	...	...	...	...	...	...	...	5,668
<b>Measles</b>	<b>2,385</b>	<b>609</b>	<b>11,145</b>	<b>1,033</b>	<b>6,178</b>	<b>2,742</b>	<b>203</b>	<b>523</b>	<b>2,361</b>	<b>335</b>
Male	1,235	291	5,646	522	481	1,438	104	270	1,146	172
Female	1,098	280	5,417	504	414	1,301	98	253	1,209	163
<b>Pertussis</b>	<b>1,292</b>	<b>1,106</b>	<b>2,440</b>	<b>8,030</b>	<b>2,724</b>	<b>3,605</b>	<b>7,401</b>	<b>10,151</b>	<b>9,799</b>	<b>5,408</b>
Male	266	366	1,051	3,782	1,037	1,653	3,337	4,552	4,421	2,528
Female	285	455	1,235	4,229	1,148	1,948	4,054	5,564	5,371	2,872
<b>Rubella</b>	<b>1,260</b>	<b>559</b>	<b>1,384</b>	<b>402</b>	<b>704</b>	<b>2,265</b>	<b>1,028</b>	<b>237</b>	<b>300</b>	<b>302</b>
Male	637	274	771	207	486	1,721	739	114	146	206
Female	539	260	573	191	122	543	289	123	153	96



#### 4.14 Cases of Notifiable Diseases<sup>1</sup> (concluded)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	number of cases									
<b>Salmonella</b>	<b>11,712</b>	<b>11,626</b>	<b>10,673</b>	<b>8,947</b>	<b>9,055</b>	<b>6,969</b>	<b>6,977</b>	<b>6,453</b>	<b>6,389</b>	<b>6,587</b>
Male	2,564	2,654	2,624	4,281	2,583	3,377	3,432	3,185	3,183	3,240
Female	2,682	2,813	2,740	4,596	2,644	3,567	3,522	3,252	3,186	3,332
<b>Tuberculosis</b>	<b>1,972</b>	<b>2,031</b>	<b>1,982</b>	<b>1,964</b>	<b>1,942</b>	<b>2,049</b>	<b>2,039</b>	<b>2,075</b>	<b>1,930</b>	<b>1,849</b>
Male	1,134	1,173	1,140	1,083	1,137	1,136	1,144	1,129	1,043	995
Female	838	858	834	879	804	910	895	946	887	854

1. Components may not add to total as sex was not stated for some respondents.

2. National figures not available from 1990 to 1992.

3. National figures exclude Alberta

Source: Statistics Canada, Catalogue no. 82-221-XDE.

#### 4.15 Cancer Probabilities

	Probability of developing cancer by age							Lifetime probability of:	
	30	40	50	60	70	80	90	developing	dying
	%								
<b>Male</b>									
<b>All cancers</b>	<b>0.7</b>	<b>1.3</b>	<b>2.8</b>	<b>8.0</b>	<b>19.9</b>	<b>33.7</b>	<b>40.0</b>	<b>40.9</b>	<b>26.9</b>
Prostate	--	--	--	0.7	4.2	9.4	11.9	12.3	3.8
Lung	--	0.1	0.3	1.4	4.3	7.5	8.9	9.1	8.2
Colorectal	--	0.1	0.3	1.1	2.8	5.0	6.1	6.3	2.9
Bladder	--	--	0.1	0.3	1.1	2.0	2.6	2.7	0.9
Lymphoma	0.2	0.3	0.5	0.8	1.4	2.1	2.4	2.5	1.5
Oral	--	0.1	0.2	0.5	1.0	1.4	1.4	1.6	0.6
Stomach	--	--	0.1	0.2	0.6	1.1	1.4	1.5	1.1
Kidney	--	--	0.1	0.4	0.8	1.2	1.5	1.5	0.6
Leukemia	0.1	0.1	0.2	0.3	0.6	1.0	1.3	1.3	0.9
Pancreas	--	--	0.1	0.2	0.5	0.9	1.1	1.1	1.2
Melanoma	--	0.1	0.2	0.4	0.6	0.8	0.9	0.9	0.3
<b>Female</b>									
<b>All cancers</b>	<b>0.7</b>	<b>1.8</b>	<b>4.7</b>	<b>10.1</b>	<b>18.7</b>	<b>28.2</b>	<b>33.7</b>	<b>35.0</b>	<b>22.4</b>
Breast	--	0.4	1.7	3.7	6.4	9.1	10.5	10.8	4.0
Colorectal	--	0.1	0.3	0.8	2.1	3.9	5.3	5.6	2.7
Lung	--	0.1	0.3	1.1	2.5	3.9	4.6	4.7	4.2
Lymphoma	0.1	0.2	0.3	0.6	1.0	1.7	2.1	2.2	1.3
Body of uterus	--	--	0.2	0.6	1.3	1.9	2.1	2.2	0.6
Ovary	--	0.1	0.2	0.5	0.9	1.3	1.5	1.5	1.1
Pancreas	--	--	--	0.1	0.4	0.8	1.0	1.1	1.2
Leukemia	0.1	0.1	0.2	0.2	0.4	0.7	1.0	1.0	0.7
Stomach	--	--	0.1	0.2	0.5	0.7	0.9	0.9	0.4
Bladder	--	--	0.1	0.1	0.3	0.6	0.8	0.9	0.7
Kidney	--	--	--	0.1	0.3	0.6	0.8	0.9	0.4
Cervix	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.3
Melanoma	0.1	0.1	0.3	0.4	0.5	0.7	0.8	0.8	0.2

Source: National Cancer Institute of Canada, *Canadian Cancer Statistics 1998*, Toronto, 1998.

4.16 Time-Loss Work Injuries<sup>1, 2</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>15 years and over both sexes,</b>	<b>617,997</b>	<b>620,979</b>	<b>586,770</b>	<b>520,547</b>	<b>455,659</b>	<b>423,184</b>	<b>429,034</b>	<b>410,464</b>	<b>377,885</b>
15-29 years	251,994	242,411	213,330	177,556	146,835	131,181	131,653	121,452	109,717
30-49 years	273,355	281,974	279,606	263,730	240,043	229,088	234,290	224,186	207,744
50 years and over	79,096	78,347	77,487	72,465	66,412	61,352	61,941	59,436	55,616
Unknown age	13,552	18,247	16,347	6,796	2,369	1,563	1,150	5,390	4,808
<b>Men, 15 years and over</b>	<b>482,248</b>	<b>478,408</b>	<b>442,005</b>	<b>387,403</b>	<b>335,546</b>	<b>311,854</b>	<b>315,475</b>	<b>271,570</b>	<b>270,751</b>
15-29 years	203,675	194,616	168,869	137,473	112,941	101,326	101,731	84,721	83,468
30-49 years	209,384	215,162	210,285	193,826	174,806	167,062	170,424	148,867	149,336
50 years and over	59,050	57,894	56,535	51,495	46,225	42,434	42,592	37,458	37,359
Unknown age	10,139	10,736	6,316	4,609	1,574	1,032	728	524	588
<b>Women, 15 years and over</b>	<b>134,399</b>	<b>137,439</b>	<b>135,604</b>	<b>130,744</b>	<b>118,762</b>	<b>110,693</b>	<b>112,607</b>	<b>97,936</b>	<b>97,056</b>
15-29 years	47,909	47,411	44,045	39,344	33,495	29,645	29,640	25,058	24,326
30-49 years	63,492	66,317	68,755	68,723	64,557	61,737	63,418	55,457	55,091
50 years and over	19,899	20,297	20,796	20,637	19,974	18,830	19,216	17,155	17,335
Unknown age	3,099	3,414	2,008	2,040	736	481	333	266	304
<b>Sex unknown, 15 years and over</b>	<b>1,350</b>	<b>5,132</b>	<b>9,161</b>	<b>2,400</b>	<b>1,351</b>	<b>637</b>	<b>952</b>	<b>40,958</b>	<b>10,078</b>
15-29 years	410	384	416	739	399	210	282	11,673	1,923
30-49 years	479	495	566	1,181	680	289	448	19,862	3,317
50 years and over	147	156	156	333	213	88	133	4,823	922
Unknown age and sex	314	4,097	8,023	147	59	50	89	4,600	3,916

1. A time-loss work injury is counted when an employee is compensated for a loss of wages following an accident, or where a worker is compensated for a permanent disability with or without any time lost in employment.

2. Data for British Columbia not available by sex in 1995.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

#### 4.17 Hospital Separations,<sup>1</sup> 1994–95

	All ages	Less than 15	15–24	25–44	45–64	65 and over
	number of separations per 100,000 population					
<b>All diagnostic groups</b>	<b>11,729</b>	<b>5,801</b>	<b>8,222</b>	<b>9,630</b>	<b>11,534</b>	<b>32,121</b>
Infectious and parasitic diseases	188	308	137	124	122	336
Neoplasms	816	81	97	351	1,331	3,311
Endocrine, nutritional, metabolic and immunity diseases	232	119	110	124	279	783
Diseases of blood and blood-forming organs	92	97	44	31	71	343
Mental disorders	608	87	552	762	642	1,068
Diseases of the nervous system and sense organs	363	249	127	197	368	1,284
Diseases of the circulatory system	1,591	39	77	340	2,227	8,398
Diseases of the respiratory system	1,165	2,029	610	397	744	3,207
Diseases of the digestive system	1,340	585	718	984	1,798	3,552
Diseases of the genito urinary system	761	206	455	756	941	1,761
Complications of pregnancy and childbirth	3,378	16	7,067	7,398	9	–
Diseases of the skin and subcutaneous tissue	147	104	111	113	162	330
Diseases of the musculoskeletal system and connective tissue	539	105	256	415	739	1,606
Congenital anomalies	77	260	51	28	25	20
Conditions originating in the perinatal period	53	260	–	–	–	–
Symptoms, signs and ill-defined conditions	627	446	304	360	765	1,820
Injury and poisoning	947	621	903	715	847	2,378
Supplementary classification of factors influencing healing	480	197	201	261	469	1,921

1. Discharges or deaths.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

#### 4.18 Health Improvement Measures, 1996–97

	Both sexes		Male		Female	
	number	%	number	%	number	%
<b>Total<sup>1</sup></b>	<b>23,420,102</b>	<b>100.0</b>	<b>11,495,242</b>	<b>100.0</b>	<b>11,924,860</b>	<b>100.0</b>
Nothing	12,213,211	52.1	6,309,243	54.9	5,903,969	49.5
Increase exercise	6,832,435	29.2	3,238,273	28.2	3,594,162	30.1
Lose weight	1,288,524	5.5	518,507	4.5	770,017	6.5
Improve eating habits	1,190,613	5.1	453,665	3.9	736,948	6.2
Quit smoking/reduce amount smoked	590,618	2.5	292,168	2.5	298,450	2.5
Drink less alcohol	67,047	0.3	52,367	0.5	–	–
Receive medical treatment	285,232	1.2	114,252	1.0	170,979	1.4
Take vitamins	197,350	0.8	78,887	0.7	118,462	1.0
Other	239,994	1.0	115,691	1.0	124,303	1.0
Not stated	515,078	2.2	322,188	2.8	192,890	1.6

1. Population 15 years and older.

Source: Statistics Canada, Catalogue no. 82-221-XDE.



4.19 Exercise<sup>1</sup> Frequency, by Age, 1996-1997

	Total <sup>2</sup>	Regularly	Occasionally	Rarely	Not stated
Number of people					
<b>15 and over</b>	<b>23,444,124</b>	<b>13,385,504</b>	<b>4,345,165</b>	<b>5,058,398</b>	<b>655,057</b>
15-19	2,110,798	1,464,348	353,070	238,461	54,919
20-24	1,872,592	1,172,808	343,864	310,265	45,654
25-34	4,471,514	2,602,944	951,446	845,429	71,695
35-44	5,237,644	2,938,768	1,102,560	1,099,762	96,553
45-54	3,770,504	2,053,701	737,458	876,712	102,633
55-64	2,564,964	1,458,705	443,317	597,988	64,953
65 and over	3,416,108	1,694,229	413,449	1,089,781	218,649
<b>Men</b>	<b>11,519,428</b>	<b>6,450,094</b>	<b>2,235,138</b>	<b>2,413,777</b>	<b>420,419</b>
15-19	1,085,999	792,765	163,923	95,715	—
20-24	948,260	585,784	162,115	162,555	—
25-34	2,208,852	1,221,607	493,791	450,973	42,481
35-44	2,644,862	1,406,169	626,072	550,340	62,282
45-54	1,921,647	975,580	400,344	467,888	77,835
55-64	1,231,133	688,290	210,896	290,844	41,104
65 and over	1,478,675	779,900	177,997	395,463	125,314
<b>Women</b>	<b>11,924,696</b>	<b>6,935,410</b>	<b>2,110,027</b>	<b>2,644,622</b>	<b>234,637</b>
15-19	1,024,799	671,583	189,148	142,746	—
20-24	924,332	587,024	181,749	147,711	—
25-34	2,262,662	1,381,338	457,655	394,456	—
35-44	2,592,782	1,532,600	476,489	549,422	—
45-54	1,848,857	1,078,121	337,114	408,824	—
55-64	1,333,831	770,416	232,422	307,144	—
65 and over	1,937,432	914,329	235,451	694,318	93,335

1. Exercise includes vigorous activities such as calisthenics, jogging or racquet sports, team sports, dance classes or brisk walking for a period of at least 15 minutes.

2. Components may not add to total as frequency was not stated for up to 1% of respondents.

Source: Statistics Canada, Catalogue no. 82-221-XDE.

## 4.20 High Blood Pressure

	1994-95			1996-97		
	Both sexes	Men	Women	Both sexes	Men	Women
	% of age group with high blood pressure					
15 years and over	9	7	10	11	9	12
15-19 years	--	--	--	--	--	--
20-44 years	3	3	2	3	3	2
45-64 years	14	13	16	16	15	18
65 years and over	29	23	33	33	27	36

Source: Statistics Canada, Catalogue no. 82-221-XDE.

4.21 Percentage of Smokers,<sup>1</sup> 1996-97

	Age groups				
	12 and over	12-19	20-44	45-65	65 and over
<b>Canada</b>					
Both sexes <sup>2</sup>	23.6	15.8	28.9	22.9	13.3
Males	25.9	14.9	31.7	25.2	16.3
Females	21.3	16.6	26.2	20.6	11.1
<b>Newfoundland</b>					
Both sexes	26.5	13.9	34.5	23.4	18.7
Males	31.3	--	38.9	29.1	--
Females	21.7	--	30.2	17.4	--
<b>Prince Edward Island</b>					
Both sexes	26.7	16.5	35.1	26.5	--
Males	35.4	24.3	47.6	33.2	--
Females	18.3	0.0	22.8	19.8	--
<b>Nova Scotia</b>					
Both sexes	27.6	--	35.8	27.8	13.3
Males	30.4	--	43.0	23.7	--
Females	25.0	--	28.8	32.0	--
<b>New Brunswick</b>					
Both sexes	26.0	16.5	32.1	23.7	20.2
Males	27.8	--	34.2	22.8	29.2
Females	24.2	--	30.1	24.6	--
<b>Quebec</b>					
Both sexes	28.6	21.6	35.3	26.7	15.7
Males	31.9	22.5	36.9	30.5	23.8
Females	25.5	20.8	33.5	23.0	--
<b>Ontario</b>					
Both sexes	20.7	12.3	26.0	19.9	11.8
Males	23.0	13.4	29.1	21.4	12.5
Females	18.6	11.1	22.8	18.3	11.2
<b>Manitoba</b>					
Both sexes	22.1	15.5	26.7	23.0	12.4
Males	24.5	--	29.6	25.0	--
Females	19.8	--	23.8	21.2	--
<b>Saskatchewan</b>					
Both sexes	24.5	15.9	31.8	23.5	14.6
Males	23.8	--	31.0	22.9	--
Females	25.2	22.1	32.7	24.1	--
<b>Alberta</b>					
Both sexes	23.3	15.4	27.7	23.9	12.7
Males	24.7	--	30.4	24.7	--
Females	21.9	--	24.9	23.2	--
<b>British Columbia</b>					
Both sexes	20.3	16.1	23.3	21.5	11.7
Males	21.8	--	25.7	26.4	--
Females	18.9	24.5	21.0	16.8	--

1. Those reporting smoking daily.

2. Components may not add to total as sex was not stated for some respondents.

Source: National Population Health Survey, Statistics Canada, Catalogue no. 82-221-XDE.



4.22 Percentage of Drinkers,<sup>1</sup> 1996–97

	Age groups				
	12 and over	12–19	20–44	45–65	65 and over
<b>Canada</b>					
Both sexes	73.8	54.7	82.4	73.0	63.4
Males	78.3	54.2	86.6	78.2	73.0
Females	69.3	55.3	78.1	68.0	56.0
<b>Newfoundland</b>					
Both sexes	70.6	48.1	82.9	66.1	63.8
Males	79.4	46.7	92.5	75.6	87.5
Females	62.0	49.7	73.4	56.1	46.2
<b>Prince Edward Island</b>					
Both sexes	68.5	57.3	82.6	60.9	48.5
Males	71.6	58.6	82.8	66.6	56.8
Females	65.5	56.0	82.4	55.0	42.1
<b>Nova Scotia</b>					
Both sexes	73.1	42.3	88.4	70.2	54.1
Males	78.9	38.9	90.4	80.3	69.7
Females	67.7	45.4	86.5	60.0	43.3
<b>New Brunswick</b>					
Both sexes	68.9	59.2	78.7	70.7	43.3
Males	73.2	56.9	85.5	76.3	42.8
Females	64.8	62.0	72.2	65.2	43.7
<b>Quebec</b>					
Both sexes	76.3	65.8	83.6	74.9	62.9
Males	80.1	63.5	88.0	78.3	69.3
Females	72.6	68.1	79.0	71.6	58.5
<b>Ontario</b>					
Both sexes	72.0	48.5	80.7	70.8	65.8
Males	76.7	50.3	84.6	76.3	75.2
Females	67.6	46.6	76.9	65.5	58.5
<b>Manitoba</b>					
Both sexes	73.3	54.3	84.2	73.1	57.5
Males	79.0	52.2	90.5	79.0	66.8
Females	67.8	56.5	77.9	67.3	50.7
<b>Saskatchewan</b>					
Both sexes	72.5	57.0	86.4	72.7	49.8
Males	76.5	64.3	87.8	72.2	62.1
Females	68.6	50.2	84.9	73.1	39.6
<b>Alberta</b>					
Both sexes	73.7	53.6	82.6	72.9	61.9
Males	77.9	54.2	86.8	76.5	73.3
Females	69.5	53.0	78.3	69.2	52.9
<b>British Columbia</b>					
Both sexes	76.3	55.1	82.5	78.5	71.4
Males	81.3	50.8	86.8	86.2	83.8
Females	71.5	59.7	78.1	70.9	60.5

1. Drinkers are those who reported drinking an alcoholic beverage in the year.

Source: National Population Health Survey, Statistics Canada, Catalogue no. 82-221-XDE.





## *Education*

### **C h a p t e r**

*From a collection of tiny one-room schoolhouses (or **petites écoles** as they were called in Quebec), Canada's education system has grown to encompass an intricate mix of almost 16,000 elementary and secondary schools and some 300 colleges and universities.*

*Today, most of us spend a significant part of our lives in one or more of these schools. Mostly, our learning experiences take place in the public schools,*



which are run by local educational authorities and governed by provincial legislation. In fact, in the 1994–95 school year, only about 5% of elementary and secondary students attended private schools, either church-affiliated or non-sectarian. Another 1% were in schools for the visually and hearing-impaired or in federally administered schools, including overseas schools operated by the Department of National Defence for dependants of servicemen, and Aboriginal schools operated by the Department of Indian Affairs and Northern Development.

Since inmates of Canada’s penitentiaries can enrol in secondary, vocational and postsecondary courses on-site or through correspondence, many have undertaken further studies. In 1996–97, more than 22,000 inmates were in some type of educational program.

One very distinctive characteristic of Canada’s educational system is the diversity of students and origins, as thousands of people continue to immigrate to Canada every year. In just one Ontario high school, a display of 67 small flags has been flown to honour the ethnic origins of its 1,500–

strong student body.

For more and more Canadians, aspirations for higher education never really end. Mindful of its benefits and importance to both economic and intellectual well-being, many of us are headed to class, even if it’s not in the formal sense. In 1993, some 5.8 million Canadians, 17 years of age and over, continued their education, either on the job or in school.

The felicitous result of all this is that we are more educated than previous generations. For those of us aged 85 or more, for example, only half attended high school, and less than one in five were able to go on to postsecondary education. Today, (1996) some 40% of Canadians aged 15 and over have postsecondary credentials: degrees, certificates or diplomas. About a third hold university degrees and the rest have certificates or diplomas.

As a nation, we spend a lot on education: \$57 billion in 1993–94, which was 8% of Canada’s gross domestic product (GDP), compared with 7% in the mid-1980s. (GDP is the value of all goods and services produced in Canada.) For the most part, these are public dollars: governments contributed almost \$51 billion in 1993–94, while fees and other sources accounted for the remainder.

The expenditures for elementary and secondary education were about \$35 billion; for postsecondary education, almost \$16 billion; and for vocational education and training, about \$5 billion. Our spending on education (we tend to spend a higher proportion of GDP than most other Western countries) may be one indication of the value we place upon it.

In terms of teachers’ salaries—an important education expenditure—the historical perspective may be as telling as the data. After working as a school teacher at Upper Canada College in the late 1890s, Stephen Leacock called teaching “the most dreary, the most thankless, and the worst paid profession in the world.” Although it’s difficult to know what salary figures bore the brunt of Leacock’s disapproval, what we can provide is a contemporary salary picture. Today, (1994–1995) Canada’s teachers

Education attainment of Canadians in 1995



Source: Statistics Canada, Catalogue no. 71-005.

average about \$57,600 a year compared to a national income average for full-time workers of \$36,235.

In Leacock's era, public school teachers numbered 22,500, which was about .5% of the population. Today, the full-time teaching force at the elementary–secondary level is close to 300,000, while another 60,000 full-time educators work in universities and colleges. Together, this teaching corps makes up 1.2% of Canada's population. Altogether, the educational services industry employs about a million Canadians, and in 1996, education generated more than \$40 billion of our GDP.

## FOUNDING OF PUBLIC EDUCATION

Canada's education system has been evolving for more than 300 years. In 1616, the first teachers arrived in New France with the explorer Champlain. One of them, Brother Pacifique Duplessis, taught in Canada's first school, founded in Trois Rivières.

Seventeen years later, in 1633—although the population of New France had not yet exceeded 500—the Jesuit brothers opened the first elementary school in Quebec, as well as the Collège de Québec, which



*Detail of a photo courtesy of Dorothy Mills*

**Students from Harlem Public School, Harlem, Ontario, pose with their teacher, Edna Gile, in 1953.**



became the only secondary school in Canada for the next century. In 1663, the Seminary of Laval—the institution to which Canada’s oldest French-language university, Laval University, traces its roots—opened its doors.

By 1760, the Roman Catholic Church had established an extensive network of parish schools in the colony of New France. With the arrival of the British came conflict and change as the British Protestants and French Catholics—and later the United Empire Loyalists—wrestled over who should control and pay for schools in the colony.

Canada’s modern public education system actually dates to mid-19th century Upper Canada (now Ontario). Among the earliest Upper Canadian schools were a select few based on the British “public school” tradition, including the forerunner of the well-known private school, Upper Canada College in Toronto. In 1816, the Common School Act authorized the first elementary or “common schools,” in which every community with 25 or more school-aged children could elect trustees to build a schoolhouse, hire a teacher, and obtain textbooks. By 1838, Upper Canada had 14,700 students enrolled in 651 schools.

About this time, the famous Canadian educator, Egerton Ryerson, pronounced: “By education, I mean not the mere acquisition of certain arts, or of certain branches of knowledge, but that instruction and discipline which qualify and dispose the subjects of it for their appropriate duties and appointments in life . . .”

It was under Ryerson’s stewardship that each of these early schools became a model of free, universal, non-sectarian, and compulsory education, a model that was eventually adopted by other provinces.

## JURISDICTIONS

Like much of Canadian history, our school system is one of the great compromises of Confederation. Unlike the constitutional law of the United States, Canada’s Constitution protects denominational or “separate”

schools. Consequently, the public school system includes Protestant and Roman Catholic separate schools. At Confederation, each province was given exclusive jurisdiction for education, with one important proviso: where denominational schools were already recognized, by law, these schools were to be protected. This condition was imposed to protect the two religious groups that had already established their own schools in Ontario and Quebec: the Protestants and Catholics. In Nova Scotia and New Brunswick (the other two provinces at the time of Confederation), denominational schools had not been formally recognized at the time of Confederation, so debates ensued about the fairness of the proviso.

As each province joined Confederation, it brought its own approach to religious schools and Canadians are still dealing with the legacy of this process. In Newfoundland, for example, in 1997, its citizenry voted 73% in favour of abolishing a system of church-run schools that had been running for the previous 277 years.

Language issues have also left their mark. In 1982, the Charter of Rights and Freedoms gave English- and French-speaking minorities the right to educate their children in their mother tongue and the courts have consistently supported this right for these two minority groups across Canada. Consequently, each province now provides a system for minority language education for Canada’s official languages. In 1997, Quebec was in the process of reorganizing its Protestant and Roman Catholic school systems to create a system that protects both denominational and linguistic rights.

## How it Works

Since the creation of the British North America Act of 1867 (now called the Constitution Act, 1867), each province has held jurisdiction over education. As a result, Canada has 12 unique school systems: 10 provincial systems, and two territorial systems. (A 13th system will come with the



establishment of Nunavut in 1999.) This means that public, private, denominational and linguistic schools are funded and administered somewhat differently in each part of the country.

Despite these differences, the basic structure holds. Most provinces offer non-compulsory kindergarten programs to prepare four- and five-year-olds for Grade 1. Public education is free to the end of secondary school. Elementary education spans Grade 1 to Grades 6, 7 or 8, depending on the jurisdiction, after which students go on to secondary or “high school.” In some parts of Canada, high school is split into two levels: Grades 7 to 9 constitute the “intermediate” or “junior secondary” level, and Grades 10 to 12, the “senior secondary” level.

In Quebec, high school ends with Grade 11, and students who want to continue their studies must obtain a diploma from *CÉGEP* (*Collège d'Enseignement Général et Professionnel*). In Ontario, students must take additional Ontario Academic Credit (OAC) courses beyond Grade 12 to be admitted to university.

At the postsecondary level, colleges and universities operate in every province. In general, colleges offer continuing education and career skills programs; the latter may take from six months to three years to complete and lead to diplomas or certificates. Universities primarily award bachelor's, master's and doctoral degrees.

## ELEMENTARY-SECONDARY EDUCATION

For most of us, elementary school is our first foray into formal education. At the age of four or five, we start kindergarten, learning how to tie shoelaces and sing the alphabet song. Thirteen years later, we graduate from high school at age 17 or 18, having learned enough about language, mathematics and science to go on to further studies or to enter the world of work.

Canada's elementary and secondary school system is a large and complex one, with local school boards controlling the day-to-day affairs.



Photo by Edith S. Watson (further details, see Appendix C)

On the “boys’ side” of the class, in an Acadian school in the early 1900s.

## Early Starts

*A Toronto school inspector and his future wife established one of the first public school kindergartens in Canada in 1883, but the idea originated with Friedrich Froebel of Germany, who believed that children's play was actually an important avenue for learning.*

*Kindergarten, a German word meaning "children's garden," would provide "reverent love for the child, profound respect for his individuality . . . and freedom and self-activity as the condition of most perfect growth physically, intellectually, and spiritually."*

*Public school kindergartens were also established in Kitchener, Ontario at about the same time and in Hamilton in 1885.*

*In 1887, Ontario formally incorporated kindergartens into the public school systems and Manitoba soon followed, on the assumption that "the proper education of children during the first seven years of their lives (did) much to reduce poverty and crime in any community."*

## School Boards

For many decades, the local school board has been a fixture of the Canadian education system. Most often, school boards are groups of elected community members with powers delegated by the province. Their primary role has been to hire teachers and other staff, and to provide school facilities and supplies. They share authority with the province over matters such as curriculum, textbook selection and courses of study.

In most provinces, school boards have had the power to levy local taxes to supplement provincial funding for education. Publicly supported school boards in Canada include those organized along religious or linguistic lines, or both. The majority are either public boards, which operate schools for school-aged Canadians of all denominations, or separate school boards, which run schools for Roman Catholic students.

But the role of school boards is changing. As provincial governments have begun to take more control over their respective education systems, the number of boards, as well as the extent of their control over financing, has been reduced. There are many examples.

In recent years, Alberta reduced the number of its school boards from 181 to 57. Concurrently, New Brunswick dissolved its boards and replaced them with a system of parent-led committees, councils and boards. In 1997, Ontario passed legislation to reduce the number of its boards from 129 to 72. Since 1994, Alberta has collected educational property taxes and then allocated funding grants to public school boards. In 1994, school board expenditures still accounted for more than 85% (over \$31 billion) of all money spent on elementary–secondary education.

## Financing

Provincial governments are the principal funders of public elementary and secondary education in Canada; the money comes largely from personal, corporate and retail sales taxes. In six provinces, local school boards obtain virtually all their funds from provincial coffers. School boards in the other four provinces supplement their provincial government funds with revenues from local property taxes. The federal government also transfers funds to provinces in direct support of universities and official language education programs.

In the Northwest Territories and the Yukon Territory, the federal government funds education, but it is governed through the assemblies of these regions. Altogether, in 1993–94, all levels of government spent over \$35 billion on more than 12,000 elementary schools and close to 4,000 secondary schools across the country.

For every student in the elementary–secondary system, therefore, the cost came to about \$6,700 annually. There is a range. In the 1993–94 academic year, for example, the average cost for a student in Newfoundland was about \$5,200, while in the Northwest Territories, it was almost \$16,400. In Canada, geography plays its part: schools serving remote locations tend to have different transportation needs and, in colder climates, more substantial energy costs.

## Teachers

In parts of Upper Canada, in the early 1800s, it was an opening-day tradition to throw the teacher out of a school window. Perhaps this was a reflection of the rough-and-ready reality of a time when students sometimes didn't attend school until an older age, and then, only when they could be spared from work at home or on the farm. Fortunately for Canada's modern teaching force—whose more than 300,000 members

*In Quebec, nuns ran salles d'asile or day care centres for the children of working parents. These were attended by more than 10,000 children between 1898 and 1902.*

*In 1992–93, more than half a million children under the age of six were enrolled in kindergarten or preschool programs in Canadian schools. Nearly 91% of five-year-olds attended kindergarten, with the highest proportions recorded in Newfoundland and Nova Scotia. Less than 30% of five-year-olds were enrolled in public schools in Prince Edward Island.*

*Only in Ontario did the majority (about 70%) of four-year-olds attend kindergarten. No four-year-olds were enrolled in public schools in Newfoundland, Prince Edward Island or British Columbia and less than 1% in Nova Scotia.*

*Although children are not obligated to attend school until the age of six or seven, local education authorities in all provinces and territories except Prince Edward Island provide programs for children before they enter Grade 1.*





*Photo by William DeKay*

**Graduation day at Stephanville, Newfoundland.**

represent the largest profession in the country—this custom has now faded away.

Today's educators are increasingly middle-aged: in 1994–95, the average age of educators was 42 years. As the education work force ages, there will surely be massive retirements in the coming decade. The number of new teachers needed will depend on future enrolments, among other factors. Meanwhile, in 1994–95, the pupil–educator ratio in public elementary–secondary schools stood at 16:1.

## **Enrolments**

The baby boomers have, to a large extent, defined trends in enrolment over the past few decades. In the early 1970s, for example, some 5.8 million students crammed Canadian classrooms. By the mid-1980s, enrolment had dropped to 4.9 million. Then, in the mid- to late-1980s, the so-called “baby boom echo” generation (the children of the boomers) began filling classrooms once again so that by 1994–95, there were more than 5.3 million students in the school system. In fact, since 1986, the number of students has increased each year.

## **Language Education**

Of the approximately 200,000 immigrants who arrive in Canada each year, about 45,000 are children who enter the school system. It's not surprising that about 61% of these newcomers to Canada's schools speak neither English nor French. In British Columbia, the number of new English-as-a-second-language students has jumped 330% in the past decade, from 16,584 students in 1987–88 to 71,371 students in 1996–97.

Meanwhile, Canada's two official languages, English and French, add another twist to the language story. Since the 1970s, the federal government has helped to promote official language education at the

## *The Cosmopolitan School*

*“The colours of its students' faces, the shadings of those colours, their clothes and “look,” from “homeboy” to Dallas Cowboys to Indian sari to heavy metal to Hong Kong Chinese “nerd,” from baseball caps to Muslim “hijab” headcoverings: all under the same roof, worn by kids rushing down the same halls for the same classes, competing to meet the same standards . . .*

*The public high school stretches across neighbourhoods, puts kids into the same box, and lets them loose for six and a half hours a day, for most of a year, year after year. If Canada is an experiment in multiculturalism, the public high school is its crucible.”*

*From the pen of former NHL hockey player Ken Dryden, who wrote a book about Canadian schools in 1995. In it he describes a school in Ontario which he points out “typifies the public high school of today's urban North America, and offers a rare glimpse of our changing reality.”*



elementary, secondary and postsecondary levels. In 1995–96, about \$85 million of Canadian taxpayers' money was spent on the Official Languages in Education program.

### The Drop-outs

In 1991, fewer than one in five 20-year-old Canadians had left school before graduation. By 1995, about one in four of those who had left school in 1991 had found their way back and graduated. In 1995, an estimated 85% of Canadians aged 22 to 24 had graduated high school.

In 1996, Aboriginal people 15 years of age and older continued to have much lower levels of schooling than the non-Aboriginal population, regardless of age groups. Some 54% of the Aboriginal population, aged 15 and over, had not received a high school diploma, compared with 35% of

the non-Aboriginal population. Some 4.5% of Aboriginal people are university graduates, compared with 16.0% of the non-Aboriginal population.

There is no question that education has an impact on life after school. From data collected in 1995, we know that one in three young women and about one in six young men who leave school before high school graduation are unemployed. Also, those who leave school early are less likely to obtain further education or training, and are more likely to work in blue-collar or service jobs and to work longer weekly hours.

The good news, though, is that about 80% of Canada's graduating class of 1991 took courses towards a postsecondary certificate, diploma or degree. Of these, some 42% went on to university. Another 29% entered college or *CÉGEP*, and 9% enrolled in a trade school, an apprenticeship program or a program offered by the private sector or a professional association.

Twenty years ago, a 25- to 29-year-old man with a high school education and a full-time job earned today's equivalent of \$35,250. By 1993, this had dropped to \$29,000, and the chances of finding employment were much less. For young women, the impact is even greater.

### HIGHER EDUCATION

Given that each province is responsible for postsecondary education, there are differences in how the system operates from one jurisdiction to the next. Nonetheless, each province has a system that includes both universities and non-degree granting institutions, such as technical institutes and community colleges.

In Canada, there are 77 universities and 216 community colleges (the latter includes Quebec's *CÉGEPs*, Colleges of Applied Arts and Technology [CAATs], and other specialized institutions offering career or university-transfer programs). In 1995–96, total expenditures on these places of higher learning came to \$16 billion.

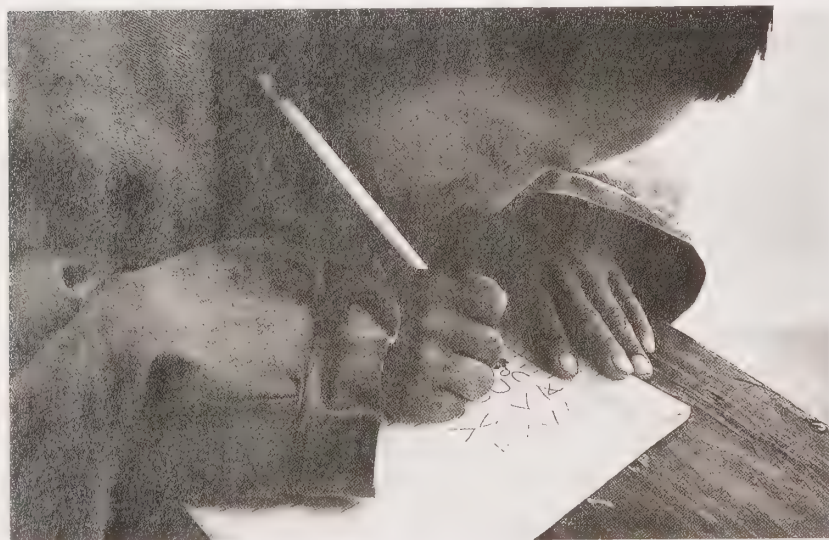


Photo by Pamela Harris

Pitsiulaq learns syllabics.



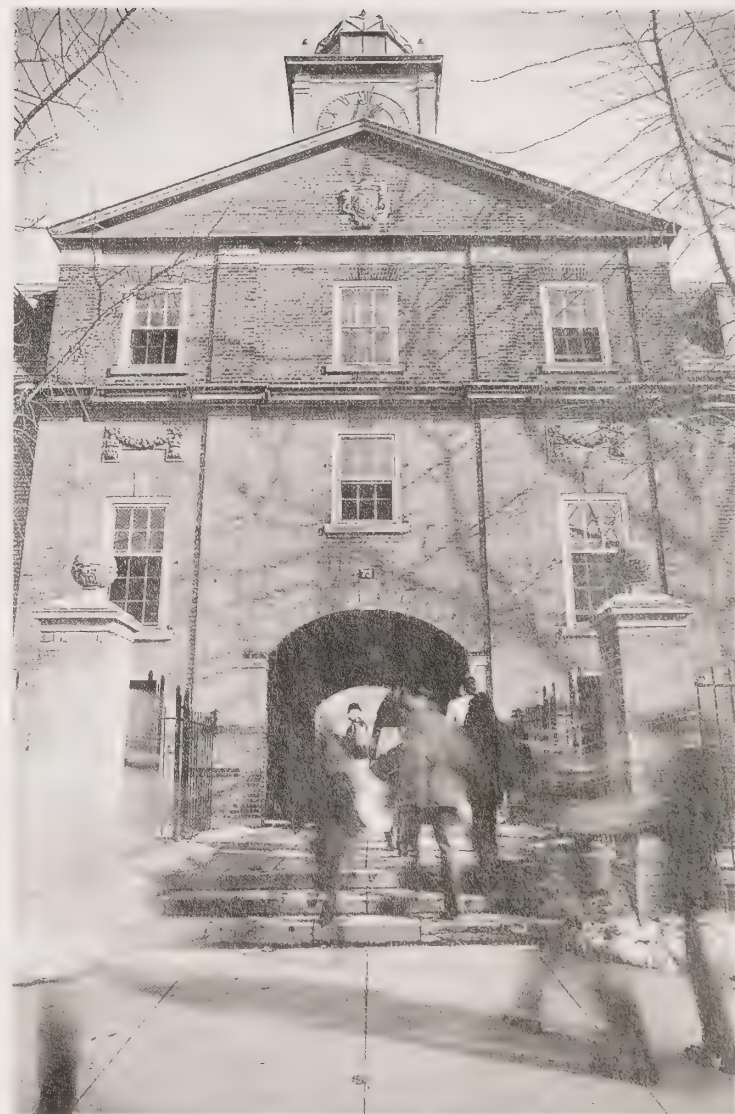
Students and governments have traditionally shared the costs of postsecondary education in Canada. Now, as governments reduce funding allocations, student fees are rising. In 1994–1995, university student fees provided almost one-quarter of university operating revenues, compared with less than one-sixth in 1985.

But the primary direct source of funding for postsecondary institutions comes from provincial and territorial governments; in 1995–96, they funded 62% of costs, or \$10 billion. The federal government also helps through programs like the Canada Health and Social Transfer (CHST), the Fiscal Equalization program and the Official Languages in Education program. These programs provide direct support for postsecondary education (\$2 billion in 1995–96). This direct funding goes toward university research and the Canada Student Loans program. In 1995–96, student fees contributed about 14% (\$2.2 billion) to the postsecondary budget. The remaining \$1.9 billion came from investment income, bequests, donations and non-government grants.

Many universities are trying innovative approaches to fund-raising. In 1996, the University of Guelph in Ontario took a business approach to getting its research products into the marketplace. It helped set up a research and development company which has since gone public and has raised more than \$6.5 million from individual and institutional investors.

## Rising Tuitions

From 1990 to 1997, tuition fees for full-time arts undergraduates on average increased 107% (or \$1,516 in 1997 dollars) across the country. For the 1997–98 school year, tuition fees rose once again in every province, except Quebec. While students in Newfoundland faced the steepest increase (18%), the average was 9% more than the previous academic year. Undergraduate arts tuition fees ranged from \$2,400 in Saskatchewan to a high of \$3,700 in Nova Scotia.



Between classes, University of Toronto.

Photo by Susan King

## *Academically Speaking*

*Its graduate roster has included Bertha Wilson, the first woman appointed to the Supreme Court of Canada, and Richard Bedford Bennett, who became Canada's 11th prime minister in 1930. Founded more than 180 years ago, in 1818, Dalhousie is not Canada's oldest university, but it may well be one of the most historically rich.*

*The story of this venerable Halifax institution dates back to the War of 1812. Initial moneys for its financing were actually the booty of war. In the fall of 1814, the Royal British Navy had captured the American port of Castine and turned it into a customs port, collecting duties on shipments. When the British returned to*

*Halifax following the war, they brought back these monies, which totalled nearly £10,000 sterling. With this, the 9th Earl of Dalhousie set out to build a college, lobbying the idea through the city council of Halifax. As a measure of this moment, even a local poet, Archibald MacMechan, wrote on the subject:*

*"The Earl of Dalhousie was governor then,  
The bravest and wisest of Scotch gentlemen,  
He said, "With this money we got at Castine,  
We'll found the best college that ever was seen."*

*The "best college" was built, only to languish for years, debt-ridden and at the centre of much feuding and political indifference. For two decades, neither students nor professors walked its halls.*

*At the heart of its troubles was the powerful role church and religion played in 19th century Nova Scotia, especially in education. While Lord Dalhousie had established a non-denominational school, such a concept did not suit the mood of the times. The three other colleges of the time were each run by one of the major denominations: there was the Anglican King's College, the Baptist Acadia College and the Roman Catholic St. Mary's College. It seemed that without a sectarian constituency to ensure its prosperity, Dalhousie was not to succeed.*

*Finally, in 1863, with statesman Joseph Howe and future prime minister Charles*

*Tupper leading the political way, Nova Scotia's Presbyterians took on the college—and the rest is history. From then on, milestone followed milestone.*

*In 1883, the first university common-law school in the British Commonwealth opened in Dalhousie and a medical faculty was established in 1912. In 1970, Dalhousie founded Canada's first university-based legal aid clinic and in 1995, became the first Canadian institution to offer a certificate in marine and environmental law.*

*Of its notable graduate roster, R. B. Bennett, who went on to become prime minister of Canada, earned himself the*

*nickname Sir Ricardo Brindle-Back Bennett. This apparently was a tribute to his brisk, astute debating skills.*

*In 1996, some 11,000 full-time and part-time students attended Dalhousie, with a complement of 850 faculty members. (Canada's largest university, the University of Toronto, had nearly 54,000 full-time and part-time students and a faculty of 2,500 in 1996.)*

*In 1996, more than 800,000 students attended Canadian universities and university colleges, which range in diversity from Kingston's Royal Military College to the Saskatchewan Indian Federated College.*

*Canada's universities award some 175,000 degrees every year. In 1996, 3.5 million—or 16% of Canadians aged 15 and over—held university degrees.*

*The University of Laval, whose roots date to 1663, is considered Canada's oldest university although it did not receive a university charter until 1852. While Dalhousie ranks 27th among Canada's 82 colleges and universities in terms of size, it has become a centre of academic excellence in the Canadian tradition, quite an achievement considering its origins as a legacy of war and its struggle to survive.*



Several Canadian universities now offer programs for which the tuition fees alone fully finance the program costs. In 1997–98, Queen's University in Kingston, Ontario charged \$52,000 for its two-year National Executive Master of Business Administration program. Also in 1997, the Richard Ivey School of Business at London's University of Western Ontario announced plans to increase tuition to \$36,000 by the year 2000 for its on-campus Master of Business Administration program.

Studying at Canadian universities is more expensive for international students than for Canadians. For the 1997–98 session, an international undergraduate student studying engineering full time in Canada paid an average tuition of close to \$10,000, compared with just \$3,400 paid by a Canadian student. For foreign students enrolled in undergraduate arts programs, the difference was also dramatic: about \$8,000 compared with the Canadian-student equivalent of \$3,000.



*Photo by the Department of the Interior, National Archives of Canada, PA-41964*

**Shirreff Hall, Dalhousie University, Halifax, Nova Scotia, 1925.**

In 1995, foreign students—there were more than 31,000 enrolled in the 1995–96 academic year—spent as much as \$1 billion in Canada on tuition fees, course materials, accommodation and general living expenses.

Borrowing money has been one option for students trying to pay for their education in Canada. Between 1964 and 1996, about 2.7 million full-time students took advantage of the Canada Student Loans program, borrowing more than \$12 billion. But a growing number of students are also having trouble repaying these loans.

In 1996, some 11,672 former students declared bankruptcy and defaulted on their loans, almost double the number in 1994. Student debt loads, too, have increased in recent years. In the 1995–96 academic year, the average debt for an undergraduate student in the final year of study was just over \$12,000, an increase of more than \$3,000 since 1990–91.

## Enrolments

Twenty years ago, the junior members of the nine-million strong generation of baby boomers were enrolling in Canada's postsecondary institutions. Today, the ranks of Canada's young adult population have thinned considerably: between 1981 and 1996, the number of 15- to 24-year-olds dropped by more than 800,000. In 1996, about one in five Canadians aged 15 to 24 pursued postsecondary studies, compared with about one in seven in 1986.

Meanwhile, after two decades of rapid growth, full-time university enrolment levelled off in the 1990s, with annual increases since 1993 not exceeding 1%. In the 1994–95 school year, about 40% of the close to one million full-time postsecondary students attended college, while the rest headed to university.

On campus, more and more seats in the classrooms are filled by women, part-timers and mature students (those over the age of 25). Whereas in 1964–65, less than one-third (31%) of full-time undergraduate

university students were women, 30 years later, they accounted for 54% of full-time undergraduate university students and 53% of full-time college students.

By the early 1990s, the ranks of part-timers—usually people who are juggling jobs with studying and family responsibilities—had grown dramatically. Between 1973 and 1993, part-time undergraduate enrolment rose from about 138,000 to more than 258,000. In 1992–93, more than one-quarter of all college students and about 29% of undergraduate university students attended school part time. Since 1992–93, part-time enrolment at universities has been dropping off. The fall enrolment for 1997 was 202,000, down 5% from 1996. Reasons for the decline are unclear, but they may be due in part to the less vibrant economy of the 1990s and steadily rising tuition fees.

At the same time, there has been a small increase in the number of mature full-time university undergraduate students.

Today, despite the commitment of time, more Canadians than ever are earning university degrees and other postsecondary qualifications. Between 1990 and 1996, the number of adult Canadians in the labour force equipped with college diplomas or university degrees had grown from nearly 7 million to more than 9 million.

## Fields of Study

Computer science and engineering may be two of the most closely scrutinized fields of study in the Canadian education system today. A joint study by the University of British Columbia and Simon Fraser University found that children in the primary and secondary grades in British Columbia believe that boys have more computer savvy than do girls. Regardless of the validity of this belief, the facts remain: in 1994–95, male



Proud relatives, Convocation, University of British Columbia, 1990.

*Detail of a photo by Daryl Kohn Cline*



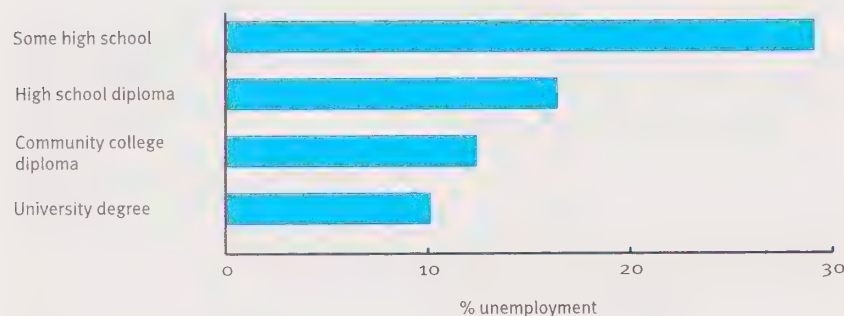
computer science students at Canadian universities outnumbered women by more than four to one; in engineering, one in five full-time undergraduate students was a woman.

Some traditionally male-dominated fields are no longer so. In 1994–95, there were equal numbers of men and women medical students. In veterinary medicine, a full 70% of students were women.

## SCHOOL AND WORK

It's clear that the longer Canadians stay in school, the more likely they are to get a job once they leave. In 1995, university graduates had a 4.9% rate of unemployment, while for Canadians not completing high school, the rate was 15.2%. Among 1990 university grads, about 80% of those with a bachelor's degree were working full time five years after graduation. Similarly, 79% of those with a master's degree and 88% of those with a doctorate also

Education and unemployment, 1996



Source: Statistics Canada, Catalogue no. 71-005.

had jobs. Those with bachelor's degrees earned a median of \$38,000, while those with master's degrees and doctorates earned medians of \$50,000 and \$54,000 respectively.

## Vocational Education and Training

There is a patchwork of vocational programs offered by public and private trade/vocational schools, community colleges, institutes of technology and other facilities. In 1993–94, one out of every 10 education dollars spent on education went to vocational (or trade) education and training. Altogether, this came to \$5.6 billion.

Some of these programs include apprenticeships and training offered by business colleges and trade schools. Training is also offered through institutions: hospitals train nursing assistants, for instance, and provincial reform schools and federal penitentiaries provide vocational training.

Until recently, a Grade 12 diploma was not normally a prerequisite for one of the most common areas of vocational training: one year pre-employment or pre-apprenticeship programs such as automotive technician and heavy-duty equipment operator. But this has changed. In Ontario and the Maritime provinces, more and more of these programs now require Grade 12.

## ADULT EDUCATION

Today, the number of Canadians involved in adult education and training activities rivals the number of students enrolled in the entire elementary, secondary and postsecondary education system (about 6.2 million students in 1992–93). In 1993, there were close to 6 million Canadians aged 17 and over who took part in adult education or training activities, excluding the more than 1 million pursuing diplomas, degrees or certificates on a full-



time basis. This makes up a full third of Canada's adult population.

A good part of adult education is tied to the world of work. In 1993, only one out of eight adults was registered in courses for personal interest reasons. The rest were upgrading skills to advance careers or enhance employment opportunities. Typically, Canadians most likely to continue studying are those with high levels of education and full-time jobs in the service sector. Educated and high-income workers are also most likely to participate in employer-supported training, meaning employers either pay for fees, sponsor courses, provide paid time off or cover the cost of course materials. Ironically, those who are the most educated and who have already participated in training are also the most likely to see themselves as having unmet training needs.

Much of adult education takes place in regular educational institutions—elementary and secondary schools, trade/vocational schools, community colleges and universities. In 1995–96, registrations in non-credit university-level continuing education courses totalled 350,260, a slight drop from the record-setting 1994–95 school year. But other suppliers outside the school system are becoming more important. In 1993, employers, unions, community centres, commercial suppliers (such as business schools) and others provided two-thirds of all the adult education and training opportunities.

## DISTANCE EDUCATION

With the mesh of Internet technology and the fundamental need to continue learning, “distance education” is becoming a highly competitive, cross-border zone for postsecondary institutions. At Queen's University, students and faculty in the Executive Master of Business Administration program use interactive videoconferencing to hold discussions with people

in different locations across the country. In 1997, New Brunswick's TeleEducation NB launched TeleCampus—one of the world's first virtual campuses—on the World Wide Web. This electronic school allows students to enrol, study and pay for courses through the Internet. By the year 2000, TeleCampus hopes to have 10,000 students taking courses on-line.

Between 1991 and 1993, among adult students, enrolment in



Photo by Susan King

Convocation! University of Toronto.



*Work by Ozias Leduc, National Gallery of Canada*

***The Young Student***

distance education courses grew 9%, reaching 420,000. More than half these students were between 17 and 34 years of age, and about three-quarters worked, mostly in clerical, sales and service occupations. About 20% were using new learning technologies, such as video conferencing or the Internet.

## LITERACY

Literacy is one very important measure of the success of our education system. Today, very few Canadians are illiterate in the sense of not being able to read, but a startlingly high proportion (43%) have only marginal literacy skills. About one in six Canadians over the age of 16 has difficulty using a weather chart to calculate temperature differences, or deciphering a simple graph. Another one in four has difficulty using a bus schedule to identify a departure time.

Fortunately, most Canadians—almost three out of every five between the ages of 16 and 65—have sufficient skills to deal with the printed materials they encounter in their daily lives.

## SOURCES

Human Resources Development Canada  
Organisation for Economic Co-operation and Development  
Royal Commission on Aboriginal Peoples  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Social Trends.** Quarterly. 11-008-XPE
- **Perspectives on Labour and Income.** Quarterly. 75-001-XPE
- **Educational Quarterly Review.** Quarterly. 81-003-XPB
- **Education in Canada 1996.** 81-229-XPB
- **A Statistical Portrait of Elementary and Secondary Education in Canada.** Biennial. 81-528-XPB
- **Education Indicators in Canada.** Canadian Education Statistics Council. 1996. 81-582-XPB
- **Leaving School: Results from a National Survey.** 1993. 81-575E
- **After High School: Report of the School Leavers Follow-up Survey.** 1996. 81-581-XPB
- **Adult Education and Training in Canada: Report of the 1994 Adult Education and Training Survey.** 1997. 81-583-XPE

Selected publications from other sources

- **Canada Student Loan Program.** Human Resources Development Canada. 1997.
- **Education at a Glance, OECD Indicators.** Organisation for Economic Co-operation and Development. 1992.
- **Federal and Provincial Support to Postsecondary Education.** Human Resources Development Canada. 1995-96.



## Education

### Legend

- nil or zero	.. not available	x confidential
-- too small to be expressed	... not applicable or not appropriate	(Certain tables may not add due to rounding)

### 5.1 Education Funding

	All funds	Government			Fees	Other sources
		Federal <sup>1</sup>	Provincial	Municipal <sup>2</sup>		
		\$ millions				
1970-71	7,674.7	930.1	4,314.6	1,719.4	320.5	390.1
1975-76	12,948.0	1,198.8	8,403.6	2,356.3	529.4	459.9
1980-81	22,201.6	1,891.0	14,717.4	3,850.8	872.7	869.5
1985-86	34,155.7	3,661.5	21,967.4	5,480.5	1,545.2	1,501.1
1991-92	53,144.3	5,438.4	31,440.3	10,835.8	2,796.2	2,633.6
1992-93	55,760.3	6,220.0	32,104.1	11,639.5	3,101.5	2,670.8
1993-94	57,119.0	6,288.0	32,566.3	11,966.2	3,346.7	2,951.7
1994-95	58,621.8	6,630.3	32,771.5	12,381.5	3,581.2	3,257.4
1995-96	59,135.0	6,722.6	32,693.3	12,660.9	3,692.5	3,365.8
1996-97	58,694.4	6,451.3	32,274.3	12,929.7	3,838.7	3,200.3

1. In addition to the direct funding reported here, the federal government also provides indirect support with respect to postsecondary education to provinces and territories under the Federal-Provincial Fiscal Arrangements and Federal Postsecondary Education and Health Contributions Act, 1977 and under the Official Languages in Education program.

2. Includes local school taxation.

Source: Statistics Canada, CANSIM, Cross-classified tables 00590203, 00590204, 00590206 and 00590306.

### 5.2 Expenditures on Education, 1994-95

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Overseas and undistributed
	\$ millions													
Education expenditures <sup>1</sup>	58,621.83	1,374.50	221.10	1,651.22	1,396.44	14,546.66	22,075.67	2,164.41	1,891.66	5,163.68	7,137.07	109.48	399.96	489.98
Level														
Elementary and secondary	35,997.90	616.81	129.12	948.28	822.26	8,123.69	14,790.78	1,467.81	1,177.76	3,191.83	4,328.95	81.77	293.09	25.75
Community college	4,207.07	31.52	9.00	52.70	58.18	1,914.21	1,126.63	43.63	41.47	301.32	567.33	5.17	50.28	5.63
University	11,857.91	230.82	44.86	435.40	308.27	3,261.97	4,142.91	455.92	443.20	1,003.79	1,365.11	7.42	28.37	129.87
Vocational training	6,558.95	495.35	38.12	214.84	207.73	1,246.79	2,015.35	197.05	229.23	666.74	875.67	15.12	28.22	328.73

## 5.2 Expenditures on Education, 1994-95 (concluded)

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Overseas and undistributed
\$ millions														
<b>Direct source of funds</b>														
Federal government <sup>2</sup>	<b>6,630.31</b>	496.36	41.24	277.63	229.29	1,350.13	1,799.91	321.98	288.86	511.67	742.46	25.38	100.88	444.53
Provincial governments	<b>32,771.51</b>	780.74	165.50	1,044.70	1,046.98	10,776.95	9,625.84	1,053.33	932.36	2,782.20	4,207.80	81.75	273.36	—
Municipal governments <sup>3</sup>	<b>12,381.48</b>	--	--	137.85	0.22	747.69	8,048.95	517.46	491.71	1,274.10	1,154.31	--	9.18	--
Fees and other sources	<b>6,838.52</b>	97.39	14.36	191.03	119.95	1,671.89	2,600.97	271.64	178.72	595.72	1,032.49	2.35	16.55	45.45

1. Includes operating, capital, student aid and all departmental expenditures.

2. In addition to the direct funding reported here, the federal government also provides indirect support with respect to postsecondary education to provinces and territories under the Federal-Provincial Fiscal Arrangements and Federal

Postsecondary Education and Health Contributions Act, 1977 and under the Official Languages in Education program.

3. Includes local school taxation.

Source: Statistics Canada, CANSIM, Cross-classified tables 00590203, 00590204, 00590206, 00590305 and 00590306.

## 5.3 Expenditures on Elementary and Secondary Education, 1994-95

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Overseas and undistributed
\$ millions														
<b>Expenditures</b>	<b>35,997.9</b>	<b>616.8</b>	<b>129.1</b>	<b>948.3</b>	<b>822.3</b>	<b>8,123.7</b>	<b>14,790.8</b>	<b>1,467.8</b>	<b>1,177.8</b>	<b>3,191.8</b>	<b>4,328.9</b>	<b>81.8</b>	<b>293.1</b>	<b>25.7</b>
<b>School boards<sup>1</sup></b>	<b>31,089.1</b>	<b>537.4</b>	<b>120.5</b>	<b>756.5</b>	<b>590.2</b>	<b>6,750.2</b>	<b>13,459.8</b>	<b>1,184.6</b>	<b>929.9</b>	<b>2,848.9</b>	<b>3,691.8</b>	<b>59.8</b>	<b>159.6</b>	<b>—</b>
Teachers salaries <sup>2</sup> including fringe benefits	<b>18,986.7</b>	377.2	75.9	542.1	396.7	3,899.7	8,583.2	687.9	570.3	1,671.6	2,053.1	36.4	92.5	—
Other operating expenses	<b>9,638.0</b>	135.6	30.1	196.9	191.7	2,466.5	3,789.1	402.2	301.5	813.5	1,232.6	17.1	61.3	—
Capital and debt charges	<b>2,464.4</b>	24.6	14.4	17.5	1.8	384.0	1,087.5	94.6	58.1	363.7	406.1	6.3	5.8	—
<b>Government expenditures<sup>3</sup></b>	<b>2,538.5</b>	64.8	4.3	156.1	216.0	656.0	588.9	151.5	169.6	138.5	262.2	11.4	93.5	25.7
Indian and Inuit schools	<b>395.5</b>	0.4	1.6	7.9	7.1	34.4	88.9	53.0	48.2	49.0	47.5	9.5	38.0	—
Special education	<b>169.8</b>	x	x	x	2.8	9.3	81.2	11.1	4.6	27.4	15.4	—	0.3	—
Departmental administration	<b>121.9</b>	7.4	0.9	5.5	2.5	42.9	29.0	3.0	6.1	14.2	7.7	1.0	1.7	—
Private schools <sup>4</sup>	<b>1,724.2</b>	x	x	x	3.7	658.7	536.3	65.7	21.6	120.0	304.8	0.1	—	—
<b>All sources of funds</b>	<b>35,997.9</b>	<b>616.8</b>	<b>129.1</b>	<b>948.3</b>	<b>822.3</b>	<b>8,123.7</b>	<b>14,790.8</b>	<b>1,467.8</b>	<b>1,177.8</b>	<b>3,191.8</b>	<b>4,328.9</b>	<b>81.8</b>	<b>293.1</b>	<b>25.7</b>
Federal government	<b>835.1</b>	0.8	3.1	16.1	15.1	82.6	202.9	105.8	95.8	98.2	95.6	18.7	74.8	25.7
Provincial governments	<b>20,619.4</b>	600.8	124.4	769.2	802.4	6,645.3	5,765.0	724.2	552.7	1,662.3	2,708.3	62.3	202.6	—
Municipal governments <sup>5</sup>	<b>12,369.3</b>	—	—	137.7	—	746.9	8,044.8	513.8	491.5	1,272.9	1,152.5	—	9.2	—
Fees and other sources	<b>2,174.0</b>	15.2	1.6	25.3	4.8	649.0	778.1	124.0	37.8	158.4	372.6	0.8	6.5	—

1. Expenditures of school boards cover calendar year 1994.

2. Includes principals and vice-principals.

3. Includes departmental services to school boards, contributions to teachers' pension funds, other departmental expenditures and federal departments in foreign countries.

4. Includes transfers to private schools from school boards.

5. Includes local school taxation.

Source: Statistics Canada, CANSIM, Cross-classified tables 00590303, 00590305 and 00590306.

## 5.4 Expenditures on Vocational Education, 1995-96

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Overseas and undistributed
\$ millions														
<b>Total</b>	<b>6,596.3</b>	<b>389.6</b>	<b>38.8</b>	<b>196.6</b>	<b>175.1</b>	<b>1,194.3</b>	<b>2,020.0</b>	<b>186.5</b>	<b>230.1</b>	<b>627.9</b>	<b>885.1</b>	<b>15.8</b>	<b>28.9</b>	<b>607.5</b>
Human resource training <sup>1</sup>	5,121.5	348.7	35.3	168.6	156.2	1,157.0	1,216.4	148.5	182.6	557.5	709.7	11.0	3.4	372.2
Federal government	3,308.3	344.5	30.7	146.9	139.7	702.4	835.2	109.9	90.9	210.8	324.5	0.4	0.2	372.2
Provincial and municipal governments	1,345.3	4.2	4.7	21.7	16.4	390.4	277.8	28.0	77.4	276.2	236.9	9.2	2.5	—
Fees and other sources	467.9	x	x	x	x	64.1	103.4	10.7	14.4	70.4	148.2	1.4	0.7	—
Other <sup>2</sup>	1,372.8	11.9	1.5	15.1	3.3	24.9	778.6	35.0	44.0	67.2	171.7	4.9	25.5	189.2
Private	101.9	0.2	0.1	2.3	2.4	12.4	25.1	3.0	3.5	3.2	3.8	—	—	46.1

1. Includes training courses purchased by the federal government, capital expenditures, grants for training in industry and allowances to trainees.

2. Includes nursing assistants training, trades training in reform schools and penitentiaries and other training programs within federal and provincial departments.

Source: Statistics Canada, CANSIM, Cross-classified table 00590204.

## 5.5 Expenditures on Postsecondary Education, 1996-97

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.	Overseas and undistributed
\$ millions														
<b>Postsecondary education</b>	<b>15,576.9</b>	<b>29.7</b>	<b>12.0</b>	<b>50.8</b>	<b>390.4</b>	<b>5,098.1</b>	<b>4,699.6</b>	<b>527.8</b>	<b>488.9</b>	<b>1,322.0</b>	<b>2,086.2</b>	<b>10.8</b>	<b>53.8</b>	<b>125.1</b>
Operating	12,118.8	26.1	10.9	37.4	299.3	3,641.7	4,145.7	415.8	377.5	1,095.7	1,425.0	3.7	34.9	—
Community colleges	3,221.1	26.1	10.9	37.4	48.1	1,410.6	930.1	42.4	30.9	223.1	422.8	3.7	34.9	—
Universities	8,897.7	x	x	x	251.2	2,231.1	3,215.6	373.4	346.5	872.6	1,002.2	—	—	—
Capital	1,262.8	0.4	—	1.6	26.4	670.0	132.5	18.3	5.1	37.5	343.4	0.3	—	—
Scholarships, awards and costs of loans <sup>1</sup>	1,822.7	1.4	1.1	1.2	41.2	720.0	411.4	76.2	96.9	163.5	215.1	5.1	18.2	15.2
Other direct departmental expenditures	372.7	1.7	-0.1	10.5	23.6	66.4	10.0	17.4	9.4	25.3	102.7	1.7	0.7	109.9
<b>All sources of funds</b>	<b>15,576.9</b>	<b>29.7</b>	<b>12.0</b>	<b>50.8</b>	<b>390.4</b>	<b>5,098.1</b>	<b>4,699.6</b>	<b>527.8</b>	<b>488.9</b>	<b>1,322.0</b>	<b>2,086.2</b>	<b>10.8</b>	<b>53.8</b>	<b>125.1</b>
Federal government <sup>2</sup>	1,785.1	0.9	0.8	20.0	35.3	407.7	524.9	83.0	86.9	156.4	240.9	3.4	2.0	125.1
Provincial governments	9,682.4	21.1	5.4	27.6	246.7	3,792.5	2,559.0	314.6	273.6	765.5	1,258.8	7.0	42.7	—
Municipal governments	1.7	—	—	—	—	—	0.1	1.6	—	—	0.1	—	—	—
Fees and other sources	4,107.8	7.7	5.7	3.2	108.4	897.9	1,615.6	128.6	128.4	400.1	586.5	0.4	9.1	—

1. Excluding the value (principal) of loans.

2. In addition to the direct funding reported here, the federal government also provides indirect support with respect to postsecondary education to provinces and territories under the Federal-Provincial Fiscal Arrangements and Federal Postsecondary Education and Health Contributions Act, 1977 and under the Official Languages in Education program.

Source: Statistics Canada, CANSIM, Cross-classified tables 00590203 and 00590206.



## 5.6 Undergraduate Arts Tuition

	1996-97	1997-98	Change from 1996-97 to 1997-98
	average tuition fees <sup>1</sup>		
	\$		%
<b>Canada</b>	<b>2,867</b>	<b>3,117</b>	<b>8.7</b>
Newfoundland	2,670	3,150	18.0
Prince Edward Island	2,920	3,150	7.9
Nova Scotia	3,499	3,737	6.8
New Brunswick	2,769	2,992	8.1
Quebec	1,725	1,726	—
Ontario	2,936	3,234	10.1
Manitoba	2,505	2,593	3.5
Saskatchewan	2,239	2,380	6.3
Alberta	2,965	3,211	8.3
British Columbia	2,661	2,705	1.7

1. Average tuition fees have been weighed by the number of students, using the most current enrolment data available.

Source: Statistics Canada, Culture, Tourism and the Centre for Education Statistics.

## 5.7 Canada Student Loans Program<sup>1</sup> Loan Certificates

	1990-91 <sup>2</sup>		1991-92 <sup>2</sup>		1992-93 <sup>2</sup>		1993-94 <sup>2</sup>		1994-95 <sup>2</sup>		1995-96	
	Loans	Students	Loans	Students	Loans	Students	Loans	Students	Loans	Students	Loans	Students
	\$ thousands	number	\$ thousands	number	\$ thousands	number	\$ thousands	number	\$ thousands	number	\$ thousands	number
<b>All loans</b>	<b>712,171</b>	<b>272,225</b>	<b>854,156</b>	<b>295,013</b>	<b>924,365</b>	<b>298,299</b>	<b>1,101,484</b>	<b>322,102</b>	<b>1,364,245</b>	<b>340,805</b>	<b>1,506,146</b>	<b>365,721</b>
<b>Full-time studies</b>												
<b>Canada</b>	<b>709,727</b>	<b>270,792</b>	<b>851,619</b>	<b>293,552</b>	<b>919,802</b>	<b>296,031</b>	<b>1,096,593</b>	<b>319,710</b>	<b>1,355,707</b>	<b>337,740</b>	<b>1,497,483</b>	<b>362,425</b>
Newfoundland	39,933	14,837	37,494	13,545	36,613	11,886	42,277	12,855	61,107	13,955	82,234	16,965
Prince Edward Island	6,288	2,618	6,275	2,578	6,628	2,296	6,820	2,288	8,388	2,308	3,563	1,094
Nova Scotia	44,954	16,414	46,492	15,931	44,664	14,518	47,417	14,959	56,882	14,928	56,948	16,286
New Brunswick	41,667	14,535	45,106	14,954	49,534	14,604	49,066	14,201	37,975	11,908	33,789	10,894
Ontario	250,390	112,596	370,147	138,723	413,300	145,374	568,688	165,895	757,977	188,825	833,053	200,728
Manitoba	39,880	12,706	40,206	12,355	42,181	12,324	39,448	11,449	37,430	10,098	39,780	10,247
Saskatchewan	51,504	17,396	54,245	16,888	59,369	17,084	56,317	16,130	62,587	15,492	62,484	15,562
Alberta	125,352	42,394	124,239	39,669	132,813	39,887	141,277	41,543	128,423	36,310	156,474	41,626
British Columbia	108,847	36,933	126,240	38,454	133,403	37,658	144,031	40,011	203,819	43,597	227,824	48,704
Yukon Territory	912	363	1,175	455	1,297	400	1,252	379	1,119	319	1,334	319
<b>Part-time studies</b>	<b>2,444</b>	<b>1,433</b>	<b>2,537</b>	<b>1,461</b>	<b>4,563</b>	<b>2,268</b>	<b>4,891</b>	<b>2,392</b>	<b>8,538</b>	<b>3,065</b>	<b>8,663</b>	<b>3,296</b>

1. Quebec and the Northwest Territories do not participate in the Canada Student Loans program.

2. From August 1 of one year to July 31 of the following year.

Source: Human Resources Development Canada, 1996-97 Estimates, Part III; 1995-96 Estimates, Part III and 1994-95 Estimates, Part III.

## 5.8 Enrolment in Elementary and Secondary Schools

	Canada <sup>1</sup>	Public	Private	Federal	Schools for sight- and hearing-impaired individuals
1960-61	4,204,520	3,989,257	168,381	44,187	2,695
1965-66	5,163,192	4,909,788	203,681	46,067	3,656
1970-71	5,836,193	5,655,431	142,601	34,290	3,871
1975-76	5,594,684	5,372,014	182,001	37,087	3,582
1980-81	5,106,288	4,855,766	209,399	37,973	3,150
1985-86	4,927,806	4,646,398	234,188	44,408	2,812
1990-91	5,141,003	4,845,308	240,968	52,285	2,442
1991-92	5,218,237	4,915,630	245,255	55,221	2,131
1992-93	5,284,145	4,967,848	257,605	56,416	2,276
1993-94	5,327,826	5,002,834	265,275	57,378	2,339
1994-95	5,362,799	5,029,114	271,974	59,383	2,328
1995-96	5,440,334	5,095,901	277,704	64,268	2,461

1. Canada total also includes Department of National Defence schools overseas.

Source: Statistics Canada, Catalogue no. 81-229-XPB.

## 5.9 Enrolment in Elementary and Secondary Schools, 1994-95

	Elementary and secondary schools	Public	Private	Federal	Schools for sight- and hearing-impaired individuals
<b>Canada</b>	<b>5,362,799</b>	<b>5,029,114</b>	<b>271,974</b>	<b>59,383</b>	<b>2,328</b>
Newfoundland	144,445	114,010	329	—	106
Prince Edward Island	24,481	24,219	217	42	3
Nova Scotia	168,507	164,433	2,213	1,159	702
New Brunswick	138,306	136,596	803	907	—
Quebec	1,137,560	1,026,454	104,530	5,979	597
Ontario	2,140,085	2,053,132	75,712	10,558	683
Manitoba	221,747	194,686	12,715	14,212	134
Saskatchewan	212,666	197,352	3,348	11,966	—
Alberta	544,561	513,299	21,721	9,438	103
British Columbia	638,111	582,842	50,347	4,922	—
Yukon Territory	5,792	5,753	39	—	—
Northwest Territories	16,338	16,338	—	—	—
DND Overseas <sup>1</sup>	200	—	—	200	—

1. Department of National Defence schools overseas.

Source: Statistics Canada, Catalogue no. 81-229-XPB.

## 5.10 Secondary School Graduates

	1986	1991	1992	1993	1994	1995
<b>Canada</b>	<b>275,708</b>	<b>260,668</b>	<b>272,918</b>	<b>281,350</b>	<b>280,378</b>	<b>295,333</b>
Newfoundland	6,840	7,327	7,592	7,539	7,960	7,318
Prince Edward Island	1,483	1,502	1,469	1,565	1,583	1,628
Nova Scotia	8,666	9,333	9,341	9,378	9,727	9,574
New Brunswick	8,835	9,588	9,650	9,631	9,664	9,281
Quebec <sup>1</sup>	76,192	59,124	64,671	66,914	66,605	79,768
Ontario <sup>2</sup>	100,826	101,328	104,616	107,972	107,560	107,323
Manitoba	11,160	11,906	12,581	12,833	12,098	11,845
Saskatchewan	10,848	10,740	10,729	11,163	11,260	11,382
Alberta <sup>3</sup>	23,048	22,452	23,093	24,378	23,817	24,858
British Columbia	27,458	26,990	28,794	29,528	29,614	31,892
Yukon Territory	148	174	161	194	161	163
Northwest Territories	204	204	221	255	329	301

1. Excludes adult graduates.

2. Excludes adult graduates of day school, night school and correspondence courses between 1992 and 1994.

3. Excludes graduates of equivalency courses.

Source: Statistics Canada, Catalogue no. 81-229-XPB.



5.11 Postsecondary Enrolment in Community Colleges<sup>1</sup>

	Both sexes				Male				Female			
	1992-93	1993-94	1994-95	1995-96	1992-93	1993-94	1994-95	1995-96	1992-93	1993-94	1994-95	1995-96
<b>Full-time enrolment</b>												
<b>Canada</b>	<b>364,655</b>	<b>369,192</b>	<b>377,972</b>	<b>389,564</b>	<b>171,094</b>	<b>174,021</b>	<b>178,060</b>	<b>182,320</b>	<b>193,561</b>	<b>195,171</b>	<b>199,912</b>	<b>207,244</b>
Newfoundland	4,639	5,000	5,971	5,732	2,433	2,613	3,001	2,847	2,206	2,387	2,970	2,885
Prince Edward Island	926	811	819	996	416	377	397	510	510	434	422	486
Nova Scotia	3,118	3,036	2,765	6,826	1,298	1,371	1,352	3,654	1,820	1,665	1,413	3,172
New Brunswick	3,164	3,248	3,560	3,751	1,629	1,691	1,894	1,651	1,535	1,557	1,666	2,100
Quebec	169,583	169,053	171,997	171,561	76,693	76,778	78,138	77,649	92,890	92,275	93,859	93,912
Ontario	117,136	121,686	126,433	134,503	57,801	60,026	62,304	65,747	59,335	61,660	64,129	68,756
Manitoba	4,067	3,990	3,918	3,612	1,895	1,921	1,869	1,740	2,172	2,069	2,049	1,872
Saskatchewan	3,542	3,593	3,476	3,163	1,528	1,479	1,475	1,280	2,014	2,114	2,001	1,883
Alberta	27,291	26,864	27,361	27,928	12,578	12,598	12,681	12,673	14,713	14,266	14,680	15,255
British Columbia	30,497	31,114	30,811	30,418	14,513	14,804	14,540	14,246	15,984	16,310	16,271	16,172
Yukon Territory	284	289	277	4,554	134	137	132	150	150	152	145	304
Northwest Territories	408	508	584	620	176	226	277	173	232	282	307	447
<b>Part-time enrolment</b>												
<b>Canada</b>	<b>185,485</b>	<b>179,210</b>	<b>164,043</b>	<b>158,515</b>	<b>74,920</b>	<b>70,783</b>	<b>63,151</b>	<b>61,069</b>	<b>110,565</b>	<b>108,427</b>	<b>100,892</b>	<b>97,446</b>
Newfoundland	190	151	206	128	111	113	137	86	79	38	69	42
Prince Edward Island	—	532	377	319	—	201	135	116	—	331	242	203
Nova Scotia	179	194	238	257	12	17	22	41	167	177	216	216
New Brunswick	42	42	42	100	13	13	13	48	29	29	29	52
Quebec	22,060	15,882	12,610	11,939	9,175	6,401	5,205	5,170	12,885	9,481	7,405	6,769
Ontario	93,534	93,979	86,762	83,528	38,142	37,486	33,617	32,400	55,392	56,493	53,145	51,128
Manitoba	1,646	1,630	1,372	1,357	634	614	519	585	1,012	1,016	853	772
Saskatchewan	710	1,051	461	243	88	146	106	91	622	905	355	152
Alberta	18,484	17,280	16,750	15,091	7,565	6,620	6,324	5,337	10,919	10,660	10,426	9,754
British Columbia	47,876	47,368	43,833	44,884	18,844	18,666	16,434	16,996	29,032	28,702	27,399	27,888
Yukon Territory	286	324	361	308	115	132	144	110	171	192	217	198
Northwest Territories	478	777	1,031	361	221	374	495	89	257	403	536	272

1. Includes related institutions such as hospital schools and agricultural, arts and other specialized colleges.

Source: Statistics Canada, CANSIM, matrix 8008 and Catalogue no. 81-229-XPB.

5.12 Community College Diplomas in Career Programs<sup>1</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95
<b>Canada</b>	<b>58,818</b>	<b>60,435</b>	<b>67,061</b>	<b>69,813</b>	<b>72,548</b>
<b>Male</b>	<b>24,131</b>	<b>24,730</b>	<b>28,065</b>	<b>28,956</b>	<b>30,288</b>
<b>Female</b>	<b>34,687</b>	<b>35,705</b>	<b>38,996</b>	<b>40,857</b>	<b>42,260</b>
Business and commerce	15,799	15,875	17,678	19,227	20,979
Male	5,141	5,125	5,657	5,921	6,597
Female	10,658	10,750	12,021	13,306	14,382
Engineering and applied sciences	12,280	12,547	14,529	14,685	14,722
Male	10,143	10,381	12,023	12,158	12,150
Female	2,137	2,166	2,506	2,527	2,572
Social sciences and services	10,214	11,057	12,513	13,526	14,304
Male	2,721	2,876	3,505	3,741	3,947
Female	7,493	8,181	9,008	9,785	10,357
Health sciences	11,229	11,153	11,478	11,500	11,020
Male	1,867	1,836	1,946	2,119	2,043
Female	9,362	9,317	9,532	9,381	8,977
Arts	5,003	5,097	5,586	5,796	5,968
Male	1,946	2,019	2,235	2,421	2,518
Female	3,057	3,078	3,351	3,375	3,450
Natural sciences and primary industries	2,823	2,774	2,893	3,137	3,708
Male	1,873	1,855	1,840	1,962	2,367
Female	950	919	1,053	1,175	1,341
Humanities	986	1,152	1,245	1,188	1,167
Male	250	298	344	317	353
Female	736	854	901	871	814
Arts and sciences	324	341	347	402	544
Male	105	122	132	151	242
Female	219	219	215	251	302
Not reported	160	439	792	352	136
Male	85	218	383	166	71
Female	75	221	409	186	65

1. Includes related institutions such as hospital schools and agricultural, arts and other specialized colleges.

Source: Statistics Canada, Catalogue no. 81-229-XPB.

## 5.13 University Enrolment

	Both sexes				Male				Female			
	1992-93	1993-94	1994-95	1995-96	1992-93	1993-94	1994-95	1995-96	1992-93	1993-94	1994-95	1995-96
<b>Full-time enrolment</b>												
<b>Canada</b>	<b>569,480</b>	<b>574,314</b>	<b>575,704</b>	<b>573,185</b>	<b>273,024</b>	<b>272,644</b>	<b>270,061</b>	<b>265,432</b>	<b>296,456</b>	<b>301,670</b>	<b>305,643</b>	<b>307,753</b>
Newfoundland	13,213	13,029	13,144	13,472	5,902	5,853	5,872	5,902	7,311	7,176	7,272	7,570
Prince Edward Island	2,724	2,691	2,544	2,425	1,230	1,161	1,039	946	1,494	1,530	1,505	1,479
Nova Scotia	29,427	29,996	29,922	29,723	13,718	13,812	13,485	13,203	15,709	16,184	16,437	16,520
New Brunswick	19,110	19,493	19,551	19,401	9,029	9,099	9,162	8,856	10,081	10,394	10,389	10,545
Quebec	135,020	137,750	135,603	132,927	64,374	65,053	62,643	60,641	70,646	72,697	72,960	72,286
Ontario	230,570	231,156	230,306	228,158	111,405	110,724	109,552	107,353	119,165	120,432	120,754	120,805
Manitoba	20,576	20,296	22,962	21,459	10,127	9,920	11,045	10,120	10,449	10,376	11,917	11,339
Saskatchewan	22,847	23,018	23,173	23,628	10,961	10,924	10,917	10,934	11,886	12,094	12,256	12,694
Alberta	50,344	51,083	50,803	52,399	24,060	24,073	23,607	24,272	26,284	27,010	27,196	28,127
British Columbia	45,649	45,802	47,696	49,593	22,218	22,025	22,739	23,205	23,431	23,777	24,957	26,388
<b>Part-time enrolment</b>												
<b>Canada</b>	<b>316,165</b>	<b>300,290</b>	<b>283,252</b>	<b>273,225</b>	<b>121,287</b>	<b>117,003</b>	<b>110,301</b>	<b>105,637</b>	<b>194,878</b>	<b>183,287</b>	<b>172,951</b>	<b>167,588</b>
Newfoundland	4,642	4,368	4,025	2,745	1,908	1,783	1,637	1,039	2,734	2,585	2,388	1,706
Prince Edward Island	914	776	587	476	292	274	225	160	622	502	362	316
Nova Scotia	8,453	7,989	7,323	6,917	3,052	2,867	2,609	2,399	5,401	5,122	4,714	4,518
New Brunswick	5,712	5,566	5,233	5,398	1,909	1,886	1,786	1,861	3,803	3,680	3,447	3,537
Quebec	122,451	117,804	112,818	109,106	47,524	46,443	44,558	43,074	74,927	71,361	68,260	66,032
Ontario	108,478	99,567	94,081	91,256	40,832	38,680	36,397	34,738	67,646	60,887	57,684	56,518
Manitoba	17,012	16,758	12,806	11,950	7,223	7,196	5,358	4,909	9,789	9,562	7,448	7,041
Saskatchewan	10,050	8,689	8,060	7,949	3,895	3,237	2,952	2,886	6,155	5,452	5,108	5,063
Alberta	17,929	17,685	16,632	15,519	6,362	6,346	6,157	5,810	11,567	11,339	10,475	9,709
British Columbia	20,524	21,088	21,687	21,909	8,290	8,291	8,622	8,761	12,234	12,797	13,065	13,148

Source: Statistics Canada, CANSIM, Cross-classified tables 00580701 and 00580702.



## 5.14 University Degrees Granted

	1981	1986	1991	1992	1993	1994	1995	1996
<b>Canada</b>	<b>115,581</b>	<b>139,768</b>	<b>159,806</b>	<b>168,872</b>	<b>173,850</b>	<b>178,074</b>	<b>178,066</b>	<b>178,116</b>
Male	58,664	66,857	70,347	73,671	75,390	76,470	76,022	75,106
Female	56,917	72,911	89,459	95,201	98,460	101,604	102,044	103,010
Social sciences	38,137	51,502	63,027	66,248	67,972	69,583	68,685	67,862
Male	21,785	25,453	28,529	30,053	30,489	30,700	29,741	29,029
Female	16,352	26,049	34,498	36,195	37,483	38,883	38,944	38,833
Education	26,372	23,158	28,074	30,033	30,419	30,369	30,643	29,792
Male	8,883	7,315	8,614	9,030	8,942	9,093	9,400	693
Female	17,489	15,843	19,460	21,003	21,477	21,276	21,243	21,799
Humanities	11,586	15,147	20,489	22,098	23,057	23,071	22,511	22,357
Male	4,780	5,839	7,497	8,005	8,573	8,427	8,428	8,271
Female	6,806	9,308	12,992	14,093	14,484	14,644	14,083	14,086
Health professions and occupations	7,403	9,832	10,769	11,262	11,832	12,183	12,473	12,895
Male	2,892	2,911	3,125	3,206	3,412	3,475	3,461	3,517
Female	4,511	6,921	7,644	8,056	8,420	8,708	9,012	9,378
Engineering and applied sciences	9,184	11,194	10,895	11,505	11,795	12,597	12,863	13,068
Male	8,421	9,915	9,269	9,687	9,887	10,285	10,284	10,446
Female	763	1,279	1,626	1,818	1,908	2,312	2,579	2,622
Agriculture and biological sciences	6,237	7,561	8,975	9,224	9,687	10,087	10,501	11,400
Male	3,328	3,558	4,064	4,037	4,268	4,309	4,399	4,756
Female	2,909	4,003	4,911	5,187	5,419	5,778	6,102	6,644
Mathematics and physical sciences	5,540	10,384	8,859	9,163	9,325	9,551	9,879	9,786
Male	4,049	7,477	6,329	6,458	6,572	6,697	6,941	6,726
Female	1,491	2,907	2,530	2,705	2,753	2,854	2,938	3,060
Fine and applied arts	3,202	4,026	4,445	4,993	5,126	5,308	5,240	5,201
Male	1,187	1,418	1,426	1,703	1,686	1,773	1,740	1,780
Female	2,015	2,608	3,019	3,290	3,440	3,535	3,500	3,421
Arts and sciences	7,920	6,964	4,273	4,346	4,637	5,325	5,271	5,755
Male	3,339	2,971	1,494	1,492	1,561	1,711	1,628	1,882
Female	4,581	3,993	2,779	2,854	3,076	3,614	3,643	3,873

Source: Statistics Canada, CANSIM, Cross-classified table 00580602.

## 5.15 University Degrees Granted, Canada and the Provinces

	1981	1986	1991	1992	1993	1994	1995	1996
<b>Canada</b>	<b>115,581</b>	<b>139,768</b>	<b>159,806</b>	<b>168,872</b>	<b>173,850</b>	<b>178,074</b>	<b>178,066</b>	<b>178,116</b>
Undergraduate <sup>1</sup>	99,445	119,958	136,611	144,061	147,246	150,879	150,803	150,282
Graduate <sup>2</sup>	16,136	19,810	23,195	24,811	26,604	27,195	27,263	27,834
Newfoundland	1,578	2,346	2,557	2,445	2,649	2,718	2,573	2,907
Undergraduate	1,460	2,163	2,328	2,212	2,359	2,465	2,296	2,634
Graduate	118	183	229	233	290	253	277	273
Prince Edward Island	289	358	462	498	499	573	585	528
Undergraduate	289	358	457	489	485	562	582	518
Graduate	—	—	5	9	14	11	3	10
Nova Scotia	4,898	6,065	6,947	7,591	7,808	8,103	7,887	7,728
Undergraduate	4,297	5,327	5,958	6,475	6,709	6,978	6,747	6,667
Graduate	601	738	989	1,116	1,099	1,125	1,140	1,061
New Brunswick	2,680	3,157	3,559	3,748	3,944	4,005	4,148	4,428
Undergraduate	2,407	2,838	3,214	3,351	3,527	3,607	3,707	3,963
Graduate	273	319	345	397	417	398	441	465
Quebec	36,065	43,205	51,805	54,587	56,335	57,853	56,858	56,256
Undergraduate	31,680	37,137	44,111	46,391	47,608	48,626	47,789	46,623
Graduate	4,385	6,068	7,694	8,196	8,727	9,227	9,069	9,633
Ontario	46,412	54,262	60,473	63,547	64,804	66,189	66,862	67,663
Undergraduate	38,911	46,095	51,267	53,740	54,415	55,766	56,591	57,068
Graduate	7,501	8,167	9,206	9,807	10,389	10,423	10,271	10,595
Manitoba	4,661	5,735	5,788	5,830	5,957	6,285	6,315	6,032
Undergraduate	4,138	5,121	5,249	5,206	5,300	5,641	5,630	5,365
Graduate	523	614	539	624	657	644	685	667
Saskatchewan	3,876	4,926	5,567	6,007	6,216	5,416	5,783	5,716
Undergraduate	3,524	4,503	5,042	5,390	5,627	4,866	5,097	5,053
Graduate	352	423	525	617	589	550	686	663
Alberta	7,647	9,798	11,301	11,477	11,638	12,280	12,271	12,241
Undergraduate	6,449	8,220	9,457	9,627	9,625	10,194	10,196	10,400
Graduate	1,198	1,578	1,844	1,850	2,013	2,086	2,075	1,841
British Columbia	7,475	9,916	11,347	13,142	14,000	14,652	14,784	14,617
Undergraduate	6,290	8,196	9,528	11,180	11,591	12,174	12,168	11,991
Graduate	1,185	1,720	1,819	1,962	2,409	2,478	2,616	2,626

1. Includes bachelor's and first professional degree, undergraduate diploma and certificate and other undergraduate qualifications.

2. Includes master's degree, doctoral degree and graduate diploma and certificate.

Source: Statistics Canada, CANSIM, Cross-classified table 00580602.

## 5.16 Population by Educational Attainment

	Population aged 15 and over	0–Grade 8		Some secondary education <sup>1</sup>		Graduated from high school		Some postsecondary		Postsecondary certificate or diploma		University degree	
	thousands	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%
<b>Both sexes</b>													
1976	17,124	4,334	25.31	8,236	48.10	..	..	1,578	9.22	1,746	10.20	1,229	7.18
1981	18,883	4,167	22.07	9,683	51.28	..	..	1,510	7.99	1,905	10.09	1,618	8.57
1986	20,182	3,695	18.31	10,008	49.59	..	..	1,905	9.44	2,445	12.12	2,130	10.55
1991	21,613	3,062	14.17	4,944	22.87	4,523	20.93	1,919	8.88	4,742	21.94	2,423	11.21
1992	21,986	3,002	13.65	4,836	22.00	4,676	21.27	1,954	8.89	4,904	22.31	2,615	11.99
1993	22,371	2,879	12.87	4,722	21.11	4,791	21.42	1,998	8.93	5,152	23.03	2,830	12.65
1994	22,717	2,958	13.02	4,678	20.59	4,513	19.87	1,975	8.69	5,586	24.59	3,007	13.24
1995	23,027	2,914	12.66	4,645	20.17	4,519	19.63	2,043	8.87	5,843	25.38	3,063	13.30
1996	23,352	2,873	12.30	4,578	19.60	4,620	19.80	2,071	8.90	6,041	25.90	3,169	13.57
<b>Men</b>													
1976	8,471	2,199	25.95	3,865	45.62	..	..	860	10.15	756	8.92	792	9.35
1981	9,308	2,099	22.55	4,595	49.36	..	..	784	8.42	842	9.05	988	10.62
1986	9,929	1,829	18.43	4,794	48.29	..	..	973	9.80	1,115	11.23	1,217	12.26
1991	10,615	1,483	13.97	2,447	23.05	2,042	19.24	943	8.88	2,338	22.03	1,362	12.83
1992	10,801	1,442	13.35	2,408	22.30	2,116	19.59	955	8.84	2,432	22.51	1,449	13.41
1993	10,989	1,387	12.62	2,358	21.45	2,170	19.75	983	8.95	2,523	22.96	1,568	14.27
1994	11,153	1,415	12.69	2,343	21.01	2,062	18.49	958	8.59	2,734	24.51	1,641	14.71
1995	11,303	1,378	12.19	2,319	20.52	2,082	18.42	996	8.81	2,878	25.47	1,650	14.60
1996	11,465	1,369	11.90	2,314	20.20	2,127	18.50	999	8.70	2,956	25.80	1,701	14.80
<b>Women</b>													
1976	8,652	2,136	24.69	4,371	50.52	..	..	718	8.30	990	11.45	437	5.05
1981	9,575	2,068	21.60	5,088	53.14	..	..	726	7.58	1,063	11.10	630	6.58
1986	10,253	1,865	18.19	5,214	50.85	..	..	932	9.09	1,330	12.98	913	8.90
1991	10,998	1,580	14.36	2,497	22.70	2,481	22.56	976	8.87	2,404	21.86	1,061	9.64
1992	11,185	1,559	13.94	2,428	21.70	2,561	22.89	999	8.93	2,473	22.11	1,166	10.42
1993	11,383	1,492	13.11	2,364	20.77	2,621	23.03	1,014	8.91	2,629	23.10	1,262	11.08
1994	11,564	1,543	13.34	2,335	20.19	2,451	21.19	1,017	8.80	2,852	24.66	1,366	11.81
1995	11,724	1,537	13.11	2,326	19.84	2,437	20.79	1,047	8.93	2,965	25.29	1,413	12.05
1996	11,887	1,504	12.60	2,265	19.10	2,493	20.90	1,072	9.00	3,085	25.90	1,468	12.40

1. Years 1976, 1981 and 1986 include persons who have either completed their secondary education or had at least some secondary education, but who have not had any postsecondary education.

Source: Statistics Canada. Catalogue no. 71F0004-XCB.



## 5.17 Population by Educational Attainment, 1996

	Population aged 15 and over	0-Grade 8		Some secondary education		Graduated from high school		Some postsecondary		Postsecondary certificate or diploma		University degree	
	thousands	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%	thousands	%
<b>Canada</b>	<b>23,353</b>	<b>2,874</b>	<b>12.3</b>	<b>4,577</b>	<b>19.6</b>	<b>4,621</b>	<b>19.8</b>	<b>2,072</b>	<b>8.9</b>	<b>5,040</b>	<b>21.6</b>	<b>3,172</b>	<b>13.6</b>
Newfoundland	452	84	18.6	105	23.2	71	15.7	37	8.2	121	26.7	34	7.5
Prince Edward Island	106	14	12.9	28	26.1	17	16.2	8	7.8	29	27.0	11	10.0
Nova Scotia	736	85	11.5	185	25.2	98	13.4	60	8.2	217	29.5	91	12.3
New Brunswick	600	105	17.4	124	20.7	115	19.2	49	8.2	146	24.4	61	10.1
Quebec	5,870	1,127	19.2	1,042	17.8	952	16.2	390	6.6	614	10.5	745	12.7
Ontario	8,848	902	10.2	1,761	19.9	1,901	21.5	818	9.2	2,127	24.0	1,340	15.1
Manitoba	855	106	12.4	193	22.6	174	20.3	80	9.3	200	23.4	103	12.0
Saskatchewan	753	103	13.7	173	23.0	152	20.2	71	9.4	176	23.4	78	10.3
Alberta	2,107	148	7.0	425	20.2	441	20.9	223	10.6	591	28.1	279	13.2
British Columbia	3,026	200	6.6	541	17.9	700	23.1	336	11.1	819	27.1	430	14.2

Source: Statistics Canada, Catalogue no. 71F0004-XCB.

## 5.18 Full-Time Teachers

	1991-92	1992-93	1993-94	1994-95	1995-96
	Elementary and secondary schools <sup>1</sup>				
<b>Canada</b>	<b>302,641</b>	<b>301,839</b>	<b>295,359</b>	<b>295,708</b>	<b>296,027</b>
Newfoundland	7,881	7,809	7,676	7,414	7,287
Prince Edward Island	1,367	1,378	1,370	1,341	1,351
Nova Scotia	10,130	9,883	9,893	9,373	9,101
New Brunswick	8,272	8,139	8,002	7,829	7,710
Quebec	64,891	64,995	64,405	65,691	66,348
Ontario	125,183	125,334	119,939	120,491	119,396
Manitoba	12,705	12,776	12,782	12,715	12,436
Saskatchewan	11,291	10,799	10,943	10,899	10,992
Alberta	27,354	27,250	26,945	26,238	27,025
British Columbia	31,858	31,748	31,639	31,998	32,702
Yukon Territory	381	421	420	423	431
Northwest Territories	1,091	1,171	1,294	1,279	1,237
Overseas	237	136	60	17	11

## 5.18 Full-Time Teachers (concluded)

	1991-92	1992-93	1993-94	1994-95	1995-96
Community colleges <sup>2</sup>					
<b>Canada</b>	<b>25,092</b>	<b>25,972</b>	<b>25,786</b>	<b>24,116</b>	<b>24,446</b>
Newfoundland	370	404	299	332	300
Prince Edward Island	81	60	46	44	48
Nova Scotia	310	395	586	649	569
New Brunswick	317	339	432	472	432
Quebec	11,672	12,087	10,171	9,757	9,649
Ontario	7,009	7,371	8,195	7,574	7,768
Manitoba	391	382	545	540	800
Saskatchewan	382	386	510	409	328
Alberta	2,198	2,186	2,393	1,632	1,605
British Columbia	2,226	2,227	2,453	2,564	2,833
Yukon Territory	73	73	78	96	69
Northwest Territories	63	63	78	47	45
Overseas	—	—	—	—	—
Universities					
<b>Canada</b>	<b>36,845</b>	<b>37,266</b>	<b>36,957</b>	<b>36,361</b>	<b>36,007</b>
Newfoundland	1,023	1,049	959	943	962
Prince Edward Island	171	178	199	196	183
Nova Scotia	2,081	2,062	2,067	1,998	2,004
New Brunswick	1,242	1,208	1,189	1,181	1,183
Quebec	8,590	8,924	9,013	9,019	8,919
Ontario	14,115	14,050	13,854	13,456	13,362
Manitoba	1,720	1,784	1,740	1,717	1,637
Saskatchewan	1,483	1,509	1,480	1,422	1,433
Alberta	3,248	3,233	3,198	3,080	2,981
British Columbia	3,172	3,269	3,258	3,349	3,343
Yukon Territory	—	—	—	—	—
Northwest Territories	—	—	—	—	—
Overseas	—	—	—	—	—

1. Teachers at the elementary-secondary level include all teaching and non-teaching academic staff (principals, vice-principals, department heads and subject supervisors). Those on leave are excluded.

2. Excludes trade level (community colleges) and public trade schools.

Source: Statistics Canada, Catalogue no. 81-229-XPB.

## 5.19 Employment, Educational and Related Services

	1994	1995	1996	1997
Employees <sup>1</sup> (thousands)				
<b>All industries<sup>2</sup></b>	<b>10,591.6</b>	<b>10,815.9</b>	<b>10,907.4</b>	<b>11,204.3</b>
<b>Educational and related services</b>	<b>937.1</b>	<b>937.3</b>	<b>935.2</b>	<b>923.5</b>
Educational services	894.7	891.9	890.6	880.7
Elementary and secondary education	587.0	585.1	592.1	584.4
Postsecondary non-university education	117.1	117.5	110.4	110.0
University education	190.6	189.4	188.1	186.2
Libraries, museums and other educational services	42.4	45.3	44.6	42.8
Library services	20.6	20.1	17.4	15.8
Museums and archives	9.9	10.4	10.3	10.7
Other educational services	11.9	14.8	16.9	16.3

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72F0002-XDE.

5.20 Earnings,<sup>1</sup> Educational and Related Services

	1994	1995	1996	1997
Average weekly earnings <sup>2</sup> \$				
<b>Educational and related services</b>	<b>671.84</b>	<b>669.68</b>	<b>671.64</b>	<b>668.38</b>
Educational services	682.33	680.90	683.29	679.68
Elementary and secondary education	718.15	715.17	715.74	709.18
Postsecondary non-university education	608.65	611.91	629.14	625.26
University education	617.28	617.79	612.93	619.26
Libraries, museums and other educational services	450.63	448.97	438.86	435.84
Library services	419.17	422.76	423.28	412.78
Museums and archives	525.13	533.06	516.88	511.23
Other educational services	443.38	425.75	407.36	408.72
<b>All industries<sup>3</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72F0002-XDE.



## 5.21 Enrolment in Second Language Immersion Programs

	1985-86		1990-91		1991-92		1992-93		1993-94		1994-95	
	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
<b>Canada</b>	<b>120,622</b>	<b>41,717</b>	<b>170,766</b>	<b>78,757</b>	<b>197,497</b>	<b>102,906</b>	<b>225,218</b>	<b>72,114</b>	<b>223,362</b>	<b>80,068</b>	<b>223,154</b>	<b>81,625</b>
Newfoundland	1,669	346	3,003	1,266	3,108	1,891	2,967	1,829	2,844	1,695	2,705	2,349
Prince Edward Island	1,584	908	1,678	1,693	1,679	1,832	1,705	1,563	1,678	1,798	1,609	1,853
Nova Scotia	1,375	484	2,648	2,638	2,779	4,769	2,684	5,367	2,721	6,254	2,727	7,238
New Brunswick	7,253	7,277	6,534	10,159	6,537	8,450	6,534	9,934	6,562	9,642	6,770	9,827
Quebec	..	..	..	..	22,959	9,958	23,264	10,077	23,824	10,389	24,194	11,211
Ontario	64,121	23,698	94,004	39,902	98,584	51,439	124,907	19,112	123,699	24,992	125,182	21,500
Manitoba	10,230	2,351	14,166	5,438	13,885	5,784	13,489	6,123	13,082	6,116	12,886	6,406
Saskatchewan	5,340	625	8,507	2,206	8,240	2,611	7,794	3,166	7,308	3,348	7,042	8,339
Alberta	15,588	3,429	20,246	6,678	20,033	7,011	19,867	7,882	19,505	8,079	18,697	8,339
British Columbia	13,026	2,564	19,403	8,581	19,135	8,905	21,688	6,818	21,527	7,490	20,709	8,369
Yukon Territory	247	..	294	75	288	103	31	93	339	116	313	127
Northwest Territories	189	35	283	121	270	153	288	150	273	149	320	81,627
<b>Total outside Quebec</b>	<b>120,622</b>	<b>41,717</b>	<b>170,766</b>	<b>78,757</b>	<b>174,538</b>	<b>92,948</b>	<b>201,954</b>	<b>62,037</b>	<b>199,538</b>	<b>69,679</b>	<b>198,960</b>	<b>70,414</b>

Source: Statistics Canada, Catalogue no. 81-229-XPB.

## 5.22 Education Indicators, International Comparisons, 1995

	Canada	Australia <sup>1</sup>	France	Germany	Italy	Japan	Netherlands	Spain	Sweden	Switzerland	United Kingdom	United States
	%											
<b>Social and economic context</b>												
Educational attainment (25-64 years)												
Lower secondary or less	25	47	32	16	65	..	39	72	25	18	24	14
Tertiary (non university and university level)	47	24	19	23	..	..	22	16	28	21	21	33
Labour force participation												
Upper secondary education	79.0	81.0	83.0	77.0	76.0	..	78.0	80.0	91.0	82.0	82.0	79.0
University education	89.0	89.0	87.0	90.0	87.0	..	86.0	87.0	94.0	92.0	91.0	89.0
<b>Costs and school processes</b>												
Education expenditure as a percentage of total public expenditures <sup>1</sup>	13.8	13.6	10.8	9.4	8.8	10.8	9.4	12.6	11.0	15.6	11.6	13.6
Participation rate in formal education (5-29 years, excluding early childhood)	58.6	54.1	60.4	55.4	50.5	53.4	56.5	57.7	52.4	51.1	56.4	57.0
Net university enrolment rate (18-21 years)	23.4	21.1	..	7.9	..	..	23.2	24.9	13.0	5.2	20.9	21.9
<b>Educational outcomes</b>												
Secondary school graduation rate	72.0	..	87.0	88.0	67.0	94.0	80.0	73.0	64.0	79.0	..	76.0
University, first degree graduation rate	31.0	34.0	..	..	1.0	23.0	..	10.0	8.0	..	31.0	32.0
University, second degree graduation rate	4.9	12.1	..	..	..	1.9	..	..	2.8	..	11.2	12.0
Unemployment rate by level of educational attainment (25-64 years)												
Upper secondary education	8.6	6.2	8.9	7.9	7.9	..	4.8	18.5	8.7	2.8	7.4	5.0
University education	4.6	3.3	7.0	4.7	7.3	..	4.1	13.8	4.2	2.6	3.5	2.5

1. 1994 data.

Source: Organisation for Economic Co-operation and Development, *Education at a Glance: OECD Indicators*, Paris, 1997.



## *Household and Family Life*

### **C h a p t e r**

*Like all family albums, Canada's is a chronicle of marriage and children, home life and the passage of time. It shows a photo of a bride on a dash up the church steps, and freeze frames of family life: mom and dad with the kids and the family pet. In it, we find older couples who have been married 60, even 70 years.*

*But over time and especially in the last 10 years, the portrait of family life in Canada has altered and new snapshots show us how*



much we are changing. With more lone parents, a general increase in divorce and the dramatic rise in common-law unions, the new portrait is one of a certain social upheaval. It even shows us looking a little tired, not surprising since many Canadians report the difficulty of juggling work commitments with home life.

Family conduct has changed in other ways as well. For one thing, we are putting off marriage until we are older which also makes us older at the birth of our children. For another, we are having smaller families: two children per family now seems to be the norm. As the Canadian economy has pivoted from an agrarian lifestyle to a more urbanized, industrial life, the role of family members has also changed. No longer are so many children required to lend a hand on the family farm. More recently, the

decline in family size has been due to family break-up and the increase in empty-nest families.

Many more women are now in the labour force and as a consequence, have less time for family life. With the trend to smaller families, the first and last child are closer in age and parents finish childrearing duties in a shorter time frame.

What is more ephemeral or not as easy to see is the quality of our daily lives. While many of today's families face economic stresses because of the breakdown of families or inadequate support payments, dual income families are also stressed. They too report a lack of time and the difficulty they have in paying for day-care, hockey school, dancing lessons, the latest in video games and even gas for the family van to drive the kids to soccer practice.

Many of the organized activities we have for children, from jazz ballet to ringette to hockey camps, to the many electronic devices with which we fill our homes, are essential for the offspring of mothers and fathers who are both in the labour force.

Today's families do not spend as much time in family relationships, and social networks tend to be organized groupings: from tennis clubs to service clubs to softball teams. More time is also clearly being spent in isolated electronic "virtual" relationships: in 1997, some 1.5 million households were hooked up to the Internet.

Dual careers, the search for career satisfaction and many of the accessories of our modern lives have imposed a lifestyle that has created its own stresses and strains. In some cases, this is a consequence of economic and social choices. Other developments also indicate the move away from direct family relationships, with their large, loosely knit network of friends and connections. More and more Canadians are choosing to live alone. In 1996, some 18% of the population lived outside a family relationship, either alone or with friends.



Photo by T.E. Moore

Work by Charlotte Schrieber (further details, see Appendix C)

*Springfield on the Credit, 1884*

Despite these many changes, however, it is clear that family life—of one kind or another—is still the central unit of social life in Canada. In 1996, more than four-fifths of us lived in a family setting and three out of every four of our children lived in a family headed by a married couple.

## FAMILY LIFE

So there is a great diversity in Canadian families. While the traditional notion of the family circle of mother, father, Dick and Jane, Marmaduke the dog and Ginger the cat is still much in evidence, increasingly, mother and father may be living common law rather than as a legally married couple. More children are now living with only one of their parents and many live with a different parent on the weekend than they do through the week. With parents remarrying and forming new families, Dick and Jane may also be step-siblings.

As the population ages, there are more and more empty-nesters. The aging of the population as well as the diseases to which we succumb have also left more elderly people, particularly women (some diseases cause more deaths among men than women), living alone, although often family members are nearby or in close contact.

Culture, religion, family type and lifestyles all contribute to family life. Despite different perceptions of what family life is, Canadians consistently declare “family” to be the most important aspect of their lives. In 1996, there were 7.8 million families in Canada and generally, they each had about three members. Altogether, some 80% of us were either husbands, wives, common-law partners, lone parents or children.

## HOUSEHOLD LIFE

While most Canadians live in private households, not all private households contain families. In fact, the central position of the nuclear family is now being challenged by the rising incidence of other types of living arrangements.

In addition to lone-parent families, the rising incidence of common-law unions and the many other variations on the family theme, there is the growing proportion of solo households.



Photo by Jory van Tiedemann

About 45% of Canada's families are of the nuclear variety: mom, dad and kids.





*Detail of a photo by Claire Beaugrand-Champagne, Canadian Museum of Contemporary Photography*



## The Solos

In 1996, some 2.6 million Canadians lived alone, as a consequence of divorce, aging or just plain choice. Of all the living arrangements that can be found in private households in Canada, fully 24% consist of just one person.

While unattached individuals are not new in our society, what is new is the increased likelihood that, finding ourselves alone, we would set up a private household. Just a few decades ago, we might very likely have lived with a next of kin, or in an extended family.

On the other hand, in the 1990s, difficult economic times have caused many young Canadians to remain at home with their parents, as they pursue higher education or cope with unemployment. For young people, the chance to fly solo was quite high from the 1960s to the 1980s, a time of prosperity, and a social easing of the pressure to marry.

Today's solos tend to be better educated than their married contemporaries and more likely to hold professional or managerial jobs. Seniors make up one-third of those living alone and women are much more likely than men to live alone. Of the women who live alone, many are aged and have been widowed.

Income also plays a role. The higher an older woman's income, the more likely she is to live alone, presumably because she has the means to support her independence. Of the men who live alone, about half are in the 30 to 54 age group. They often represent the fall-out from divorce, given that child custody is typically granted to women.

There is a fair debate on the trend to flying solo. It has been argued that this is one of the most profound changes to occur in Canada's history, a reflection of our evolution towards more independent and individual lifestyles. Others prefer to explain it in terms of family or economic factors that don't necessarily mean we have fundamentally changed our thinking.

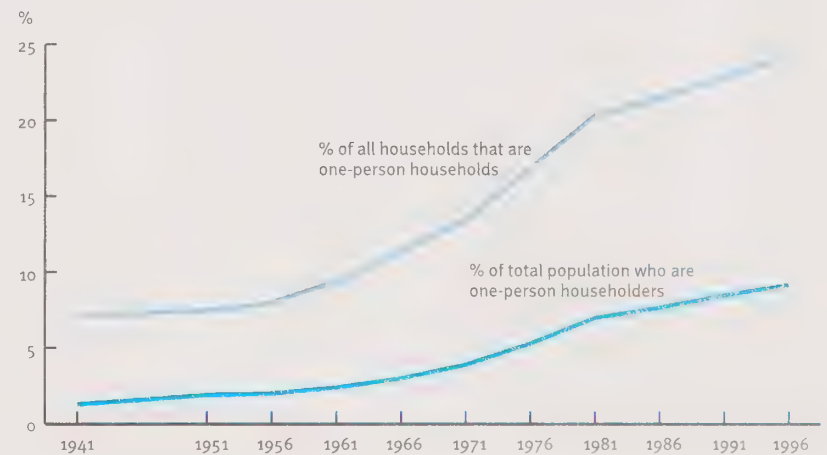
## Collectives

For a minority of Canadians, "home" doesn't fit any of the standard categories; these people live in a collective dwelling of some description. In the mid-1990s, almost half a million people lived in such dwellings, most of which were hospitals, group homes, orphanages, jails, hotels, work camps or military bases.

In 1995, about 250,000 Canadians lived in long-term health-care institutions. Most were aged 65 or older and had only recently entered the facility (within the previous two years).

Meanwhile, the existence of transition homes—shelters that provide secure, temporary refuge for abused women and children—tells us that behind the doors of some Canadian homes, there is violence. In the mid-

### Living alone



Source: Statistics Canada, 1941 to 1996 Censuses.

## *Upon a Midnight Clear*

*“Christmas when I was a child was always a marvelous time. We used to go to the carol service on Christmas eve, and those hymns still remain my favourites. Hark the Herald Angels Sing, Once in Royal David’s City, and the one I loved best, It Came Upon a Midnight Clear.*

*It couldn’t have been even near midnight when we walked home after those services, but it always seemed to me that I knew exactly what “midnight clear” meant. I had no sense then that there could be any kind of winter other than ours.*

*It was a prairie town, and by Christmas the snow would always be thick and heavy, yet light and clean as well, something to be battled against and respected when it fell in blinding blizzards, but also something which created an upsurge of the heart at times such as those, walking back home on Christmas eve with the carols still echoing in your head.*

1990s, there were more than 85,000 annual admissions to such houses. The majority were young women (under the age of 35) with children (under age 10) escaping situations that involved some kind of physical abuse or threats, generally received at the hands of a spouse or partner.

### **The Empty-Nesters**

Though most Canadian households with families still echo with the sound of young voices, there are now many more families whose children have grown and left home (or who had no children to begin with).

Those who had the fledglings and are now empty-nesters are the largest and fastest growing type of family without children. In 1996, all families without children made up about 37% of all families, up from 32% in 1981.

There may be even more empty-nesters than most studies suggest since lone parents are not considered empty-nesters once their children leave, at least not statistically. Also of note is that as the population ages, with its large baby boom component, the trend to a growing number of empty-nesters is sure to continue.

Indeed, couples can now expect to spend as much as 20 or 30 years together as empty-nesters. Some experts claim that these longer periods together may contribute to a climbing divorce rate. People are less likely to want to “wait it out” for example, if they are in an unhappy marriage.

### **THE RISE AND FALL OF FAMILY LIFE**

Families form. Families break up. People divorce one another. People live together without marrying. Common-law unions dissolve. Parents carry on as lone parents. Marriage seems increasingly fragile, and yet, marriages still outnumber divorces; in 1996, there were 157,000 marriages and just slightly more than 71,000 divorces. It seems the underlying commitment of

Canadians is to family life of one sort or another: once having tried and failed, one simply tries again.

In Canada, as in most industrialized nations, the decline in marriage rates is no longer news, although for the first time since the Great Depression of the 1930s, the total rate stopped falling and even rose somewhat in 1994. In 1996, the rate fell again to 5.2 marriages per 1,000 people, a continued decline from 7.0 per 1,000 in 1988.

It turns out that Prince Edward Islanders are the most likely to marry, followed by couples in the Yukon Territory and Alberta. Least likely to marry are couples in Quebec and the Northwest Territories. In 1996, there were only 3.1 marriages for every 1,000 people living in the Northwest Territories compared with 6.7 in Prince Edward Island. From 1995 to 1996, marriage rates fell everywhere in Canada except in P.E.I., Nova Scotia and New Brunswick.

The rise in common-law unions, on the other hand, is still very much a recent phenomenon. In 1981, slightly more than 6% of all couples in Canada lived together without being formally married. In 1996, just less than 14% of all couples were common-law unions. In Quebec, the proportion of common-law couples (25%) in 1996 was two and a half times higher than in the rest of Canada.

The rate of divorce has been relatively constant although the number of divorces in 1996 was the lowest since 1985: if current rates are maintained, nearly 3,700 out of every 10,000 marriages will end in divorce.

Although the divorce rate is constant, regional differences continue. Exceptionally, as far as the provinces are concerned, couples in Quebec had the highest probability of divorce in 1996. This is unusual since generally Quebecers have divorced less frequently than those in other provinces. Today, the divorce rate in Quebec (46 per 100 marriages) is higher than that of British Columbia (45) and Alberta (38).

The Yukon Territory, however, holds the record for the highest rate of divorce in Canada. In 1996, the rate there was 56.1 divorces for every 100

*The evening would be still, almost silent,  
and the air would be so dry and sharp  
you could practically touch the coldness.  
The snow would be dark-shadowed and  
then suddenly it would look like  
sprinkled rainbows around the sparse  
streetlights. Sometimes there were  
northern lights. My memory, probably  
faulty, assigns the northern lights to all  
those Christmas eves, but they must have  
appeared at least on some, a blazing eerie  
splendor across the sky, swift-moving,  
gigantic, like a message. It was easy then  
to believe in the Word made manifest. Not  
so easy now. And yet I can't forget, ever,  
that the child, who was myself then,  
experienced awe and recognized it."*

*Canadian fiction writer Margaret  
Laurence's description of Christmas on  
the Prairies in an excerpt from the  
short story Upon a Midnight Clear,  
written in 1976.*





*Photo by David Trattles*

**Joe and Annie Henry of Moosehide, Yukon Territory.**

marriages. This is more than double that of Prince Edward Island, whose rate of 24 was the lowest, and far above the rate in Quebec. From 1995 to 1996, divorce rates dropped across the country, except in Newfoundland and British Columbia and in the two territories.

## Marriage

According to Mrs. F. Beavan, who wrote *Sketches and Tales of Life in the Backwoods of New Brunswick* in 1845, marriages in the early days of this country came with a tradition known as “stumping.” This meant that the names of the parties and the announcement of the event were written on slips of paper and inserted on numerous tree stumps bordering the road: a way of publishing the banns locally.

The rituals may have changed with the years, but marriage still brings with it a mix of the traditional and romantic. The majority of Canadians marry in the summer and on Saturdays, particularly those Saturdays that fall on a long weekend.

Generally, the decision to marry and the timing are matters influenced by economic and social realities. In the mid-1920s, for example, the marriage rate declined to an all-time low. Canadians without jobs and money simply put off marriage plans.

During the Second World War, however, marriage rates soared, perhaps as a reaction to the uncertainty of life in wartime. Who knew whether one would return or not? In 1946, as those who did survive came home, the marriage rate hit another high, with fewer than 11 marriages for every 1,000 people. In comparison, in 1996, there were 5.2 marriages for every 1,000.

Today’s low marriage rates, however, are taking place in a new world: not only is the job market uncertain, but there is the growing acceptance of the single lifestyle and common-law unions.

The rate of remarriage, on the other hand, is on the rise. In the mid-1990s, in a quarter of all marriages, at least one partner was on the second time around, compared with 14% in 1974. This increase is largely the result of the easing of divorce laws in the 1980s.

In 1974, about one in 10 people who married was a divorcee; in 1996, this was up to about one in five.



St. Stephen's Church, near Police Outpost Provincial Park, Alberta.

Photo by Harry Savage



Consequently, first-time brides and grooms are a little older. In 1995, grooms averaged about 29 years of age, while brides averaged 27. Twenty-five years ago, the average age for a first-time groom was 25, while for a bride, it was 23. Not surprisingly, the average age of those remarrying is up. In 1995, divorced men and women averaged about 43 and 39 years of age respectively on their wedding day, while widowed men and women averaged 61 and 55 years of age, respectively.

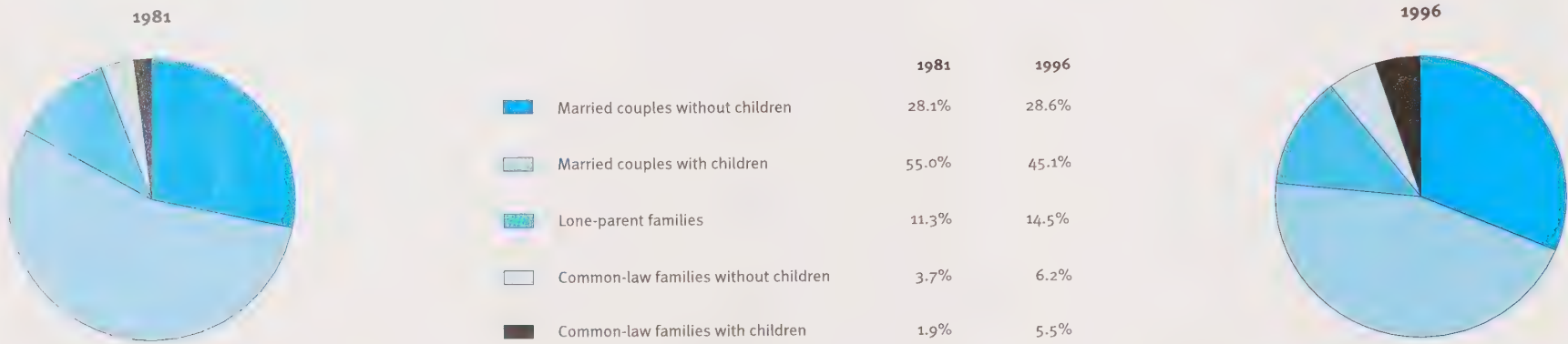
Generally, brides and grooms marry someone of the same marital status. In other words, most first-timers wed other first-timers, while over half of divorced brides and grooms wed other divorcees.

Common Law

Where once members of Canadian society would not readily have accepted the idea of two people living together outside of a formally married union, today we increasingly do. By 2022, if the current trend towards common-law life continues, the number of common-law couples will equal that of married couples.

Between 1981 (the first time a census reported common-law marriages) and 1996, the number of these unions tripled. In 1996, nearly 2 million Canadians lived common law, representing some 12% of the

Changing family structures



Source: Statistics Canada, 1981, 1996 Censuses.



7.8 million families in private households. In Quebec, the province in which common-law relationships are most popular, one couple in four is in a common-law union.

Family history appears to play a role. Women whose parents separated before they were 15 years old, for example, are about 77% more likely to be in a common-law relationship than those whose parents did not separate.

Many people who live in common-law unions view it as a trial run for marriage. However, researchers tell us that about three-quarters of all common-law relationships end within five years. Those couples who do marry (after living common law) are more likely to divorce than those whose marriages were not so preceded. The reason for this seems fairly ambiguous. It may lie in the common-law experience, or in the type of person who chooses this option, or both.

Mostly, common-law unions appeal to the young and these couples are less likely to have children, although the proportion of common-law couples with children is rising. In 1996, almost half of the common-law couple families included children, whether born to the current union or brought to the family from previous relationships.

Common-law unions first became widespread in northern Europe in the mid-1960s and later spread to Western Europe and to this side of the Atlantic. In Canada, it was not until the 1970s that the phenomenon was sufficiently common for statisticians to begin to study it.

## Divorce

In the early 1980s, Statistics Canada undertook a rigorous examination of the issues around divorce and marriage in Canada, and concluded that “in western society, there has been a growing acceptance of divorce as the suitable, if not laudable, conclusion to unsatisfactory marital relationships.”



Work by Jean Paul Lemieux, National Gallery of Canada

*The Visit*



Work by E.H. Varley, National Gallery of Canada

*John*

The study, entitled *Divorce: Law and the Family in Canada*, noted that the wish to divorce may really be a reaffirmation of the idea of marriage, since through divorce, one is free to continue the search for the ideal marriage. Given that just under one-half of those who divorce do eventually remarry, there would seem to be some support for this argument.

Marriages may dissolve as a result of separation, divorce or the death of a spouse. In Canada, the divorce rate is very high and had been climbing steadily from the end of the Second World War, to peak in 1987. During the 1990s, however, the number of divorces has levelled off, fluctuating between 77,000 and 79,000 annually. In 1996, only 71,500 couples divorced, down 8% from 1995 and the lowest number since 1985. But divorce rates do not tell the entire story. They do not include desertions, or divorces granted in other countries, or judicial separations. They do not reflect the break-up of common-law unions.

Also important is the legal aspect of divorce. In Canada, divorce rates reached a peak in the late 1980s following changes to the Divorce Act in 1985 which created less restrictive laws.

Other factors are also at play. Even after the backlog of unhappy marriages had been dealt with, divorce rates continued to rise. Researchers tell us that one of the likeliest reasons for divorce has to do with young age at marriage. Another has to do with the large numbers of women in the labour force who have the economic independence they may need to leave a failed marriage.

In 1996, some 1.6 million people reported that they were divorced (a 28% increase from 1991) and 700,000 reported that they were separated (up 15% from 1991).

As the number of divorces in Canada increases, so too does the number of people able to remarry. Divorce thus leads the way to an increasing array of new family types. There are step families, blended families and lone parents. These families all face special problems. For most women, separation or divorce results in drastic drops in income and living standards.

## Lone Parents

One of the most profound developments on the Canadian family scene has been the growth in lone-parent families. In 1996, for example, there were 1.1 million such families, an increase of 33% from 1986. The vast majority (83%) of these families are headed by women and largely they are young: over a third are under the age of 35.

Another great change has taken place in the case of lone parenthood. Where once this was largely the result of the death of a spouse—more than 60% of all lone parents in the 1950s and 1960s were widows or widowers—now it's mostly the result of a marital breakdown. In addition, people who have never been married also contribute to the rising number of these families. In 1981, just 10% of lone parents were single; in 1996, their share had climbed to 22%.

Life for lone-parent families tends to be difficult. Women and children often find themselves impoverished, even those who do receive help from departed mates.

In fact, the life of a Canadian child can be a vastly more complicated affair than it was even a decade ago. While the majority of children live with their parents, more and more of them find themselves in step families. In 1995, there were about 430,000 step families, representing about 10% of all couple families with children.

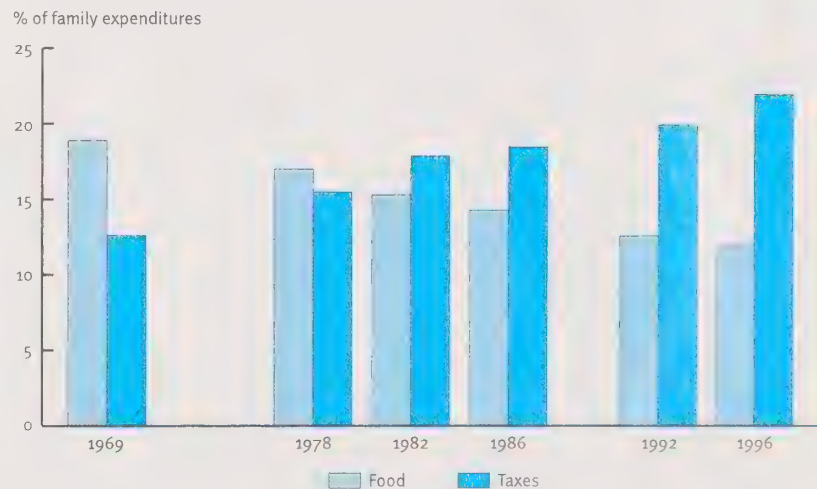
Most Canadian children live in a positive family environment, and most receive a healthy start to life. A small number, however, experience the kinds of difficulties that can hinder their passage to healthy adulthood.

In 1994, for example, about 4% of the 4.7 million children under the age of 12 were affected by such realities as family dysfunction and parental depression.

In 1994, some 17% of children in families with incomes less than \$30,000 lived with a parent exhibiting signs of depression, compared with only 5% of children whose family income was above \$60,000.

Children living with single mothers are almost twice as likely to have emotional problems as those living in two-parent families. In 1994, one in six children under the age of 12 lived in lone-mother families.

Families continue to spend more on taxes than food



Source: Statistics Canada, Catalogue no. 62-555-SPE.



## *Priceless is Expensive*

*Children are priceless, but when the pragmatics of childrearing are considered, priceless is still expensive. In 1997, it cost \$9,560 to raise an infant from birth to first birthday, according to experts at Manitoba Agriculture, who calculate the cost of bringing up baby each year.*

*Here's what they say: by the time a child born in 1997 reaches the age of 18, a son will have cost \$158,273, and a daughter \$157,376, or \$897 less. As many parents can attest, boys' hearty appetites inflate the family's grocery bill: in fact, boys between 16 and 18 cost almost \$2,100 a year to feed, compared with \$1,570 for girls of the same age.*

*From the age of one, however, girls consistently cost their parents more to clothe (\$138 a year more by the time they're 15); and from age 12 onwards, their personal care costs are more than \$100 a year higher than those for boys.*

*More children do raise costs, but interestingly the increase is not exponential: utilities, for example, increase only 10% with each additional child.*

## **INCOMES AND SPENDING**

In 60% of two-partner families in Canada today (1995), both partners work. On average, these families earn \$68,900. If only one spouse was to be working, almost 18% of these two-partner families would be considered low-income. In reality, the figure is nearly 5%.

Family incomes now clearly reflect the influence of women born during the baby boom between 1946 and 1965. These women have postponed marriage and childbearing and have had fewer children than previous generations in Canada. They are more educated and this has given them a stronger earning power.

The number of women who now earn more than their male partners has increased fourfold since 1967, and the number of families in which the wife is the sole breadwinner is also up.

There is considerable variation in the incomes of Canadian families. Incomes are lower in the east, higher in the west. Single mothers tend to have the lowest incomes; however, there are more poor children in two-parent families than in lone-parent families. For most women, separation or divorce means a loss in income and a drop in living standards.

The sentiment is oft-repeated: "In this world, nothing is certain but death and taxes." Canadian taxpayers can certainly attest to the latter. In 1995, the average family paid \$11,000 in income tax, or about 20% of its total income. That's up from the 1971 average of 15% of total income.

Today (1995), once families have paid their taxes, they are generally left with incomes about 5% lower than in 1980.

In terms of low incomes, the 1996 Census tells us that about 5.5 million Canadians fell into this category in 1995. They are deemed to be low-income because they generally spend about 55% or more of their total income on food, shelter and clothing. Many low-income earners are single-parent families, and it is mostly single mothers with children with the lowest incomes.

For these people, Canada's social safety net is vitally important. They rely on employment insurance, on social assistance and GST rebates. But they have been the first to suffer as governments throughout the 1990s have cut back on health care and social assistance. In addition, many of Canada's single mothers do not receive support payments, even if the payments have been ordered by the courts. The result is that many Canadian women and children live in poverty.

While the best insurance against poverty is still a good job, even a full-time, year-round job does not necessarily insulate one. In 1996, some 237,000 families were in a low-income situation even though the chief breadwinner worked full time, year-round.

On the other end of the income spectrum are the very well-off. The top 10% of all families in 1996 had average incomes in the neighbourhood of \$140,000. Generally, income earners in this group are professionals: doctors, dentists and surgeons.

## **RRSPs and Other Savings**

Between 1991 and 1995, almost two-thirds of Canadians saved for retirement, either through a Registered Retirement Savings Plan (RRSP) or a Registered Pension Plan (RPP). Income has a lot to do with it: nine out of 10 Canadians earning between \$30,000 and \$39,999, and virtually everyone in higher income groups, put money aside for retirement at least once during these years.

Income levels affect retirement savings contributions more so than age: as income rises, so does the likelihood of having RRSP or RPP savings. There are also significant differences between the saving patterns of men and women. Although women's average savings are lower than those of men (women are more likely to earn lower incomes), at each income level, women are more likely than men to save each year, and in particular, are more likely to save money using RRSPs or RPPs.

## **Who is Poor?**

*There is no clear and widely accepted answer to the question of what defines poverty in Canada.*

*If we define poverty by income, Old Order Mennonites in southern Ontario or Hutterites in Western Canada may be called poor, even though their incomes reflect religious faith more than economics. Other Canadians have low taxable income only because they take full advantage of the tax guidelines.*

*In the early 1970s, Statistics Canada created what is referred to as "low income cut-offs" (LICOs). These cut-offs vary by size of community and size of family. They are based on the idea that families with incomes below a particular level usually spend 55% or more of their income on food, shelter and clothing.*

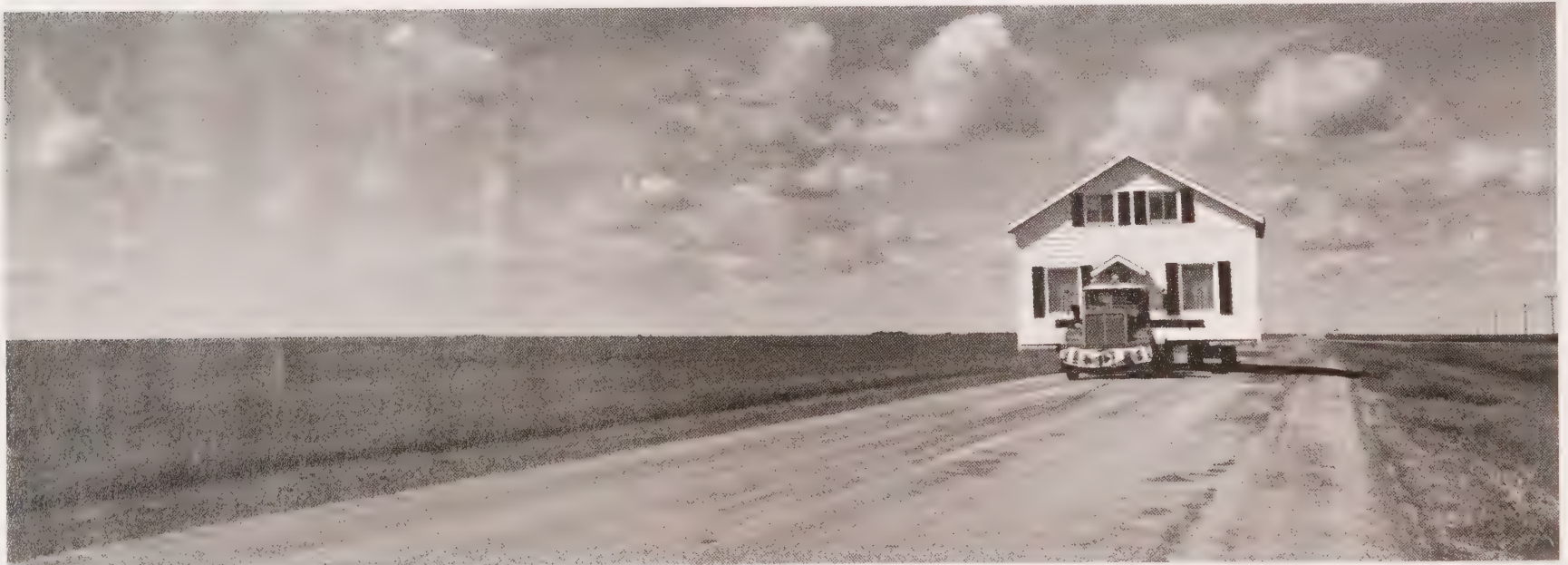
*In 1995, about 5.5 million Canadians fell into this category, up 38% from 1989. The increase was even larger for children. Almost 1.5 million Canadian kids lived in low-income families in 1995, up 45% from 1989. There is one encouraging note: since 1980, there has been a steady decline in the percentage of seniors with low incomes.*

Age does have an influence, however. Between 1991 and 1995, the proportion of us contributing at least once during this period was highest for those aged 45 to 54 (73%), and lowest for those aged 25 to 34 (59%). Although Canadians are not taking full advantage of the RRSP savings opportunity—in 1995, only 35% of all eligible taxfilers in Canada actually made a contribution—the use of RRSPs and RPPs is growing. Annual contributions to registered retirement savings plans rose steadily from about \$15 billion in 1991 to more than \$26 billion in 1996. Over the same period, the number of contributors increased 28% from 4.7 million to almost 6 million.

## HOUSE AND HOME

In 1995, Nicole Eaton and Hilary Weston (the present Lieutenant-Governor of Ontario) wrote a book on what “home” means to Canadians. What they found in their travels across the country was one unifying theme: Canadians feel a deep attachment to, and pride of place in their homes.

We see this attachment in the numbers of us who own the places in which we live. The walls may be wood frame, brick, concrete or even straw bale, but the majority of us have purchased these walls. In 1997, almost two-thirds of us owned our dwelling, and one-third of us no longer paid a mortgage.



Moving day near Briercrest, Saskatchewan.



In 1997, renters spent on average 21% of their income on shelter, up from 18% in 1987. The average monthly rental in 1997 was \$540. Single parents with children under the age of 18, one-person households (not including seniors) and multi-family households all tended to rent rather than own.

It's interesting also to tour Canadian kitchens and living areas. We appear to like timesaving devices. In 1997, about 94% of households with two parents and children had a microwave oven, while 64% had a dishwasher. In comparison, 73% of one-person households had a microwave and 27% a dishwasher. More than half of Canada's households can fire up a gas barbecue.

Similarly, computers are now standard items, especially in the homes of families enjoying higher incomes. In 1997, about 36% of Canadian households owned a home computer—that's 4.2 million households. Ownership is highest in British Columbia, Alberta and Ontario, where more than four in 10 households reported having a computer. As for the Internet, 1.5 million Canadian households (13%) in 1997 were connected, almost double the 1996 rate (7%).

On top of timesaving devices and computers, there's more entertainment equipment in our homes. Take the example of VCRs, where rates have soared. In 1983, (when data were first collected on this item) something like 6% of households owned a VCR, compared with 84% in 1997.

Compact disc players are another example. Some 74% of family households (two parents, children) now own CD players. Almost every household currently has a colour television, and 69% of two-parent families have two or more. Black-and-white televisions, however, have become quite scarce. In 1982, you could have found them in 43% of households; today, they are only in 12% of households.

"I'll call you from my cell phone" is no longer just the siren call of one business person to another: more and more, it's become a standard way to

keep in touch. In 1997, some 19% of households had a cellular phone, up from 14% in 1996, while almost 100% of households had a phone. In about four out of ten households, there were three or more phones plugged into the same line.

Meanwhile, parked outside the house, you are more likely to find a minivan or a four-wheel drive these days, as Canadian drivers lean towards trucks and vans. Two-parent families with children under 18 years of age are more likely than other household types to own a van or truck: in 1997, almost one-half of this group owned such a vehicle.



Work by Bernice Vincent (artist's collection)

### *Making Tea*

## *The Generosity of Canadians*

*If we construct a profile of the most likely Canadian to volunteer, that imaginary person would be a married, well-educated, Protestant woman, of Scottish, German or Ukrainian origin who lives in a medium-sized Prairie city with a family income of more than \$60,000. In contrast, the profile of the least likely Canadian to volunteer would be a young, single male working in a manual trade, who has not completed high school, of Roman Catholic or non-religious background, living in Montréal.*

*Canadians show a marked willingness both to volunteer their time and to donate to charitable organizations. In 1987 (the latest year for which we have national data on volunteering), more than 5 million adults reported volunteer work through non-profit organizations. Altogether the efforts of these people came to a billion hours, equivalent to half a million full-time jobs. On the world scene, Canadians rank especially high in so giving of their time. About 25% of Canadian adults volunteer,*

*compared with 20% of American, 15% of British, 11% of Spanish and 10% of French adults.*

*Canadians are also generous with their charitable dollars. The average charitable donation declared by 1996 taxfilers was \$730. In total, Canadians declared about \$4 billion in donations in 1996.*

*Residents in the "richer" provinces were neither the most likely to give to charity nor were they the most generous donors. On the contrary, the most likely contributors were*

*residents of Manitoba and Prince Edward Island while Newfoundlanders, with the lowest total median income, made the highest median donation.*

*Our willingness to give does not stop at the individual. Corporations have been steadily increasing their charitable contributions. In 1982, they contributed some \$200 million; in 1995, \$500 million. Our compassion as a nation also guides*

*governments to ensure that health, education and social assistance are available for all. In 1997–98, for example, the federal government transferred about \$36 billion to provincial and territorial governments, mostly in support of these programs.*

*Generally, volunteers are slightly more likely to be women (approximately six out of 10), of whom half are between the ages*

*of 25 and 44. Rural and small-town residents are more likely to be involved in volunteer activity than city dwellers. However, high rates of volunteerism are found in Saskatoon (44%), Calgary (38%) and Edmonton (38%). Prairie dwellers are particularly likely to be volunteers, as are those who are well-educated.*



## TEMPUS FUGIT

Time flies. Despite our timesaving devices, most Canadians say they have no time. If we remind ourselves that Aristotle, one of the greatest philosophers of all time, considered leisure “the aim of life,” then we must surely be a nation in trouble.

Men and women report (1992) that out of a 24-hour day, each has only about five hours, give or take, for the pursuit of leisure activities. About 35% of mothers report they have no time at all, and about 17% of men say they are highly stressed for time throughout their careers, regardless of whether they have children.

The number of hours women collectively spend working is up, not surprising since they have entered the labour force in such record numbers over the last few decades, and have added paid work to their unpaid (household and volunteer) work responsibilities. (Men have not embraced unpaid work with the same enthusiasm.) Also, the number of hours employees generally spend at work on the weekend is up: from 1991 to 1995, the percentage of people at work on Saturdays rose from 10% to 14%, while for Sunday workers it nearly doubled from 5% to 8%.

We spend about the same amount of time on unpaid work—cooking, shopping, caring for children, volunteer work and helping others—as we do on work that pays the bills. In 1992, Canadians spent an average of 1,164 hours each on unpaid work. Although men have increased the amount of unpaid work they do, women still handle the lion's share, despite their increased presence in the labour force.

## CAREGIVING

In 1996, one in eight Canadians over the age of 15—or 2.8 million of us—provided some kind of care for others who were dealing with either a long-term health-care problem or a physical limitation. Those aged 45 to 64 formed the largest proportion of caregivers, with women outnumbering men by about 3:2. Many were helping elderly parents, or were seniors caring for spouses, friends or neighbours. With the aging of the baby boom generation, and thus the parents of the boomers, it is not surprising that 15% of women and 10% of men working outside the home provided care for someone.

This does take a toll, however. Although more than one-half of caregivers did not feel burdened by their duties, such as preparing meals, shopping and personal care, one in five reported health problems, such as altered sleep patterns and high stress levels. Still, many want to do more: about 20% of us feel we could be doing more for the people we help.

## SOURCES

Bank of Canada  
Canada Mortgage and Housing Corporation  
Industry Canada  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Income after Tax, Distributions by Size in Canada.** Annual. 13-210-XPB
- **Characteristics of Dual-Earner Families.** Annual. 13-215-XPB
- **Household Facilities by Income and Other Characteristics.** Annual. 13-218-XPB
- **Low Income after Tax.** 1996. 13-592-XPB
- **Homeowner Repair and Renovation Expenditure.** Annual. 62-201-XPB
- **Family Expenditure in Canada.** Occasional. 62-555-XPB
- **Household Facilities and Equipment.** Annual. 64-202-XPB
- **Perspectives on Labour and Income.** Quarterly. 75-001-XPE
- **Births and Deaths.** Annual. 84-210-XPB
- **Marriages.** Annual. 84-212-XPB
- **Report on the Demographic Situation in Canada.** Annual. 91-209E
- **Dwellings and Households.** 1991 Census. 93-311

## Household and Family Life

### Legend

- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 6.1 Divorces

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	Number of divorces												
1978	57,155	427	135	1,960	1,153	14,865	20,534	2,187	1,428	6,059	8,265	65	77
1979	59,474	483	144	2,275	1,223	14,379	21,793	2,152	1,528	6,531	8,826	62	78
1980	62,019	555	163	2,314	1,326	13,899	22,442	2,282	1,836	7,580	9,464	82	76
1981	67,671	569	187	2,285	1,334	19,193	21,680	2,399	1,932	8,418	9,533	75	66
1982	70,436	625	206	2,281	1,663	18,579	23,644	2,392	1,815	8,882	10,165	117	67
1983	68,567	711	215	2,340	1,942	17,365	23,073	2,642	2,000	8,758	9,348	88	85
1984	65,172	590	195	2,264	1,427	16,845	21,636	2,611	1,988	8,454	8,988	100	74
1985	61,976	561	213	2,337	1,360	15,814	20,851	2,313	1,927	8,102	8,330	96	72
1986	78,304	687	199	2,609	1,729	19,026	27,549	2,982	2,479	9,556	11,299	94	95
1987	96,200	1,117	275	2,759	1,995	22,098	39,095	3,923	2,968	9,535	12,184	142	109
1988	83,507	906	269	2,494	1,673	20,340	32,524	3,102	2,501	8,744	10,760	82	112
1989	80,998	1,005	248	2,527	1,649	19,829	31,298	2,912	2,460	8,237	10,658	82	93
1990	78,463	1,016	281	2,419	1,699	20,474	28,977	2,798	2,364	8,489	9,773	81	92
1991	77,020	912	269	2,280	1,652	20,274	27,694	2,790	2,240	8,388	10,368	67	86
1992	79,034	867	227	2,304	1,633	19,695	30,463	2,657	2,325	8,217	10,431	117	98
1993	78,226	930	227	2,376	1,606	19,662	28,903	2,586	2,239	8,612	10,889	94	102
1994	78,880	933	249	2,286	1,570	18,224	30,718	2,746	2,354	8,174	11,437	97	92
1995	77,636	982	260	2,294	1,456	20,133	29,352	2,677	2,320	7,599	10,357	112	94
1996	71,528	1,060	237	2,228	1,450	18,078	25,035	2,603	2,216	7,509	10,898	115	99

Source: Statistics Canada, CANSIM, matrix 7.



## 6.2 Census Families<sup>1</sup> in Private Households by Family Structure, 1991 and 1996 Censuses

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
<b>1996</b>													
<b>Total families</b>	<b>7,837,865</b>	155,750	35,875	253,965	207,235	1,949,975	2,932,725	292,925	260,390	717,560	1,008,440	8,075	14,955
<b>Total husband-wife families</b>	<b>6,700,360</b>	<b>135,270</b>	<b>30,675</b>	<b>214,280</b>	<b>177,800</b>	<b>1,640,535</b>	<b>2,511,020</b>	<b>251,670</b>	<b>225,455</b>	<b>625,080</b>	<b>869,430</b>	<b>6,740</b>	<b>12,395</b>
Families of now-married couples	5,779,720	121,855	27,915	190,040	155,315	1,240,270	2,283,115	226,345	203,295	552,760	765,565	4,900	8,345
Families of common-law couples	920,640	13,410	2,765	24,240	22,490	400,270	227,910	25,330	22,160	72,320	103,865	1,835	4,050
<b>Total lone-parent families</b>	<b>1,137,510</b>	20,480	5,200	39,685	29,435	309,435	421,705	41,260	34,930	92,485	139,010	1,330	2,560
Male parent	192,275	3,245	855	6,040	4,840	56,920	66,665	6,805	5,640	16,555	23,900	225	585
Female parent	945,230	17,240	4,345	33,640	24,595	252,515	355,035	34,450	29,290	75,930	115,110	1,105	1,980
<b>1991</b>													
<b>Total families</b>	<b>7,355,730</b>	<b>150,710</b>	<b>33,895</b>	<b>244,625</b>	<b>198,010</b>	<b>1,883,135</b>	<b>2,726,625</b>	<b>285,895</b>	<b>257,575</b>	<b>667,915</b>	<b>887,510</b>	<b>7,105</b>	<b>12,720</b>
<b>Total husband-wife families</b>	<b>6,402,090</b>	<b>132,835</b>	<b>29,520</b>	<b>211,505</b>	<b>171,510</b>	<b>1,614,285</b>	<b>2,384,320</b>	<b>248,545</b>	<b>227,335</b>	<b>584,985</b>	<b>780,495</b>	<b>6,065</b>	<b>10,675</b>
Families of now-married couples	5,682,815	123,050	27,510	191,735	155,825	1,308,365	2,204,950	227,405	209,945	525,745	695,800	4,640	7,850
Families of common-law couples	719,275	9,780	2,015	19,775	15,685	305,920	179,370	21,140	17,390	59,240	84,700	1,430	2,825
<b>Total lone-parent families</b>	<b>953,640</b>	17,875	4,375	33,120	26,500	268,850	342,305	37,345	30,245	82,925	107,010	1,035	2,045
Male parent	165,240	3,205	705	5,430	4,505	47,645	57,700	6,905	5,260	14,330	18,830	200	515
Female parent	788,395	14,670	3,670	27,685	21,995	221,205	284,595	30,445	24,980	68,595	88,185	835	1,530

1. Census families are divided into those formed by couples and those headed by a lone parent. Married couples and common-law couples are considered families whether or not they have never-married sons or daughters living with them. Now-married and common-law couples together compose husband-wife families.

Source: Statistics Canada, 1996 Census Nation Tables.

## 6.3 Population by Marital Status

	Total			Single			Married <sup>1</sup>			Widowed			Divorced		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	thousands														
<b>Canada</b>															
1971	22,026.4	11,065.0	10,961.4	10,940.7	5,804.7	5,136.0	9,943.7	4,986.7	4,957.0	957.2	194.3	762.9	184.8	79.3	105.5
1976	23,517.5	11,764.9	11,752.6	10,974.3	5,857.6	5,116.6	11,143.5	5,569.4	5,574.1	1,069.4	200.0	869.4	330.3	137.9	192.4
1981	24,900.0	12,399.0	12,501.0	11,067.8	5,911.5	5,156.4	12,138.7	6,065.6	6,073.1	1,168.3	201.8	966.5	525.2	220.1	305.1
1986	26,203.8	13,012.9	13,190.9	11,359.4	6,084.8	5,274.6	12,828.4	6,411.2	6,417.3	1,279.1	214.7	1,064.4	736.9	302.2	434.7
1991	28,120.1	13,939.4	14,180.7	11,894.4	6,349.5	5,545.0	13,892.5	6,952.1	6,940.4	1,377.3	234.6	1,142.8	955.8	403.2	552.5
1992	28,542.2	14,149.7	14,392.5	12,118.2	6,467.7	5,650.5	13,985.3	6,998.6	6,986.7	1,400.2	240.9	1,159.2	1,038.5	442.4	596.1
1993	28,946.8	14,349.5	14,597.3	12,343.9	6,587.3	5,756.6	14,058.6	7,032.7	7,025.9	1,421.9	247.3	1,174.6	1,122.3	482.1	640.2
1994	29,255.6	14,497.2	14,758.4	12,523.7	6,679.7	5,844.0	14,083.2	7,041.5	7,041.7	1,442.8	254.1	1,188.7	1,205.9	522.0	683.9
1995	29,617.4	14,676.6	14,940.8	12,724.7	6,785.3	5,939.4	14,143.5	7,070.2	7,073.4	1,461.7	260.3	1,201.3	1,287.5	560.9	726.7
1996	29,969.2	14,847.3	15,122.0	12,915.7	6,884.5	6,031.2	14,214.1	7,101.6	7,112.5	1,480.0	266.5	1,213.5	1,359.4	594.6	764.8
1997	30,286.6	14,999.7	15,286.9	13,090.3	6,975.7	6,114.6	14,270.5	7,124.7	7,145.8	1,498.2	272.7	1,225.4	1,427.7	626.6	801.1
<b>1997</b>															
Newfoundland	563.6	281.3	282.3	244.4	130.1	114.3	276.0	139.0	136.9	27.5	5.1	22.4	15.7	7.1	8.7
Prince Edward Island	137.2	67.8	69.4	59.5	31.7	27.8	66.3	33.3	33.0	7.5	1.1	6.3	3.9	1.7	2.2
Nova Scotia	947.9	466.7	481.2	399.1	212.2	186.9	455.3	227.4	227.9	52.6	9.2	43.4	41.0	17.9	23.1
New Brunswick	762.0	376.9	385.1	322.4	171.5	150.9	371.4	185.9	185.5	40.7	7.1	33.6	27.6	12.4	15.1
Quebec	7,419.9	3,657.2	3,762.7	3,291.3	1,740.6	1,550.7	3,304.8	1,650.7	1,654.1	392.4	75.2	317.2	431.3	190.7	240.7
Ontario	11,407.7	5,636.3	5,771.4	4,863.9	2,586.3	2,277.5	5,496.4	2,742.1	2,754.3	561.9	99.1	462.8	485.5	208.7	276.8
Manitoba	1,145.2	567.8	577.4	505.6	270.3	235.3	529.1	265.6	263.4	62.9	11.1	51.8	47.7	20.8	27.0
Saskatchewan	1,023.5	508.3	515.2	454.6	243.7	210.9	473.0	237.0	235.9	56.9	9.4	47.5	39.0	18.2	20.8
Alberta	2,847.0	1,432.5	1,414.5	1,260.5	681.6	578.9	1,339.3	668.4	670.9	109.5	19.8	89.6	137.8	62.7	75.1
British Columbia	3,933.3	1,953.6	1,979.7	1,632.9	877.5	755.5	1,920.7	956.2	964.5	184.5	35.1	149.4	195.1	84.8	110.3
Yukon Territory	31.6	16.3	15.3	15.0	8.1	6.8	14.6	7.2	7.4	0.6	0.2	0.4	1.5	0.8	0.6
Northwest Territories	67.5	35.0	32.5	41.1	22.1	19.0	23.7	11.8	11.9	1.3	0.4	0.9	1.5	0.8	0.7

1. Includes persons legally married or separated, and persons living in common-law unions.

Source: Statistics Canada, CANSIM, matrices 6213 to 6225.

## 6.4 Marriages

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Number of marriages													
1980	<b>191,069</b>	3,783	939	6,791	5,321	44,848	68,840	7,869	7,561	20,818	23,830	200	269
1981	<b>190,082</b>	3,758	849	6,632	5,108	41,005	70,281	8,123	7,329	21,781	24,699	235	282
1982	<b>188,119</b>	3,727	855	6,486	4,923	38,152	71,595	8,264	7,491	22,312	23,831	225	258
1983	<b>184,675</b>	3,778	937	6,505	5,260	36,144	70,893	8,261	7,504	21,172	23,692	243	286
1984	<b>185,597</b>	3,567	1,057	6,798	5,294	37,433	71,922	8,393	7,213	20,052	23,397	212	259
1985	<b>184,096</b>	3,220	956	6,807	5,312	37,026	72,891	8,296	7,132	19,750	22,292	185	229
1986	<b>175,518</b>	3,421	970	6,445	4,962	33,083	70,839	7,816	6,820	18,896	21,826	183	257
1987	<b>182,151</b>	3,481	924	6,697	4,924	32,616	76,201	7,994	6,853	18,640	23,395	189	237
1988	<b>187,728</b>	3,686	965	6,894	5,292	33,519	78,533	7,908	6,767	19,272	24,461	209	222
1989	<b>190,640</b>	3,905	1,019	6,828	5,254	33,325	80,377	7,800	6,637	19,888	25,170	214	223
1990	<b>187,737</b>	3,791	996	6,386	5,044	32,060	80,097	7,666	6,229	19,806	25,216	218	228
1991	<b>172,251</b>	3,480	876	5,845	4,521	28,922	72,938	7,032	5,923	18,612	23,691	196	215
1992	<b>164,573</b>	3,254	850	5,623	4,313	25,841	70,079	6,899	5,664	17,871	23,749	221	209
1993	<b>159,316</b>	3,163	885	5,403	4,177	25,021	66,575	6,752	5,638	17,860	23,446	180	216
1994	<b>159,959</b>	3,318	850	5,374	4,219	24,985	66,694	6,585	5,689	18,096	23,739	169	241
1995	<b>160,251</b>	3,404	877	5,329	4,252	24,238	67,583	6,703	5,799	18,044	23,597	207	218
1996	<b>158,680</b>	3,355	835	5,160	4,260	24,090	66,625	6,460	5,745	17,915	23,825	190	220

Source: Statistics Canada, CANSIM, matrix 6.

## 6.5 Census Families

	All families <sup>1</sup>		Husband-wife families		Lone-parent families	
	Number	Average size	Number	Average size	Number	Average size
	thousands		thousands		thousands	
1971 <sup>2</sup>	<b>5,042.6</b>	<b>3.7</b>	4,566.3	3.8	476.3	3.1
1976 <sup>2</sup>	<b>5,714.5</b>	<b>3.5</b>	5,156.7	3.5	557.9	2.9
1981 <sup>2</sup>	<b>6,309.2</b>	<b>3.3</b>	5,597.2	3.3	712.0	2.7
1986 <sup>2</sup>	<b>6,726.7</b>	<b>3.1</b>	5,874.7	3.2	852.1	2.6
1991 <sup>3</sup>	<b>7,497.4</b>	<b>3.1</b>	6,524.9	3.1	972.5	2.6
1993 <sup>3</sup>	<b>7,706.5</b>	<b>3.0</b>	6,697.2	3.1	1,009.2	2.5
1994 <sup>3</sup>	<b>7,769.5</b>	<b>3.0</b>	6,747.0	3.1	1,022.5	2.5
1995 <sup>3</sup>	<b>7,850.2</b>	<b>3.0</b>	6,811.7	3.1	1,038.4	2.5
1996 <sup>3</sup>	<b>7,883.7</b>	<b>3.0</b>	6,840.9	3.1	1,042.8	2.5
1997 <sup>3</sup>	<b>8,018.4</b>	<b>3.0</b>	6,946.5	3.1	1,071.8	2.5

1. Excluding the Yukon Territory and Northwest Territories.

2. At June 1 and unadjusted for net census undercoverage.

3. Based on 1991 Census counts adjusted to July 1 and for net census undercoverage.

Source: Statistics Canada, Catalogue no. 91-213-XPB.



6.6 Census Families by Size<sup>1</sup>

	All families	Family size					Persons in families	Average family size
		2	3	4	5	6 or more		
		thousands						number
1947 <sup>2</sup>	3,030.0	948.0	741.0	582.0	327.0	432.0	11,362.0	3.7
1951 <sup>2</sup>	3,282.4	1,024.5	785.9	656.6	361.8	453.6	12,196.9	3.7
1956 <sup>2</sup>	3,705.6	1,123.9	815.3	757.9	455.0	553.6	14,053.2	3.8
1961 <sup>2</sup>	4,140.4	1,198.0	855.5	853.7	554.1	679.2	16,065.5	3.9
1966 <sup>2</sup>	4,518.4	1,308.7	893.2	921.9	622.5	772.1	17,646.2	3.9
1971 <sup>2,3</sup>	5,042.6	1,589.2	1,044.3	1,054.8	661.4	710.4	18,806.1	3.7
1976 <sup>2,3</sup>	5,714.5	2,008.0	1,217.8	1,284.8	683.9	520.0	19,729.5	3.5
1981 <sup>2,3</sup>	6,309.2	2,395.5	1,394.9	1,516.8	675.9	326.2	20,543.9	3.3
1986 <sup>2,3</sup>	6,726.7	2,689.0	1,535.0	1,642.2	639.2	221.3	21,160.7	3.1
1991 <sup>3,4</sup>	7,497.4	3,202.3	1,704.0	1,755.7	638.5	196.9	22,991.3	3.1
1992 <sup>3,4</sup>	7,617.4	3,294.8	1,729.5	1,768.6	634.0	190.3	23,243.3	3.1
1993 <sup>3,4</sup>	7,706.4	3,374.9	1,748.1	1,773.8	626.6	182.8	23,402.7	3.0
1994 <sup>3,4</sup>	7,769.4	3,444.1	1,760.2	1,772.5	617.1	175.3	23,483.5	3.0
1995 <sup>3,4</sup>	7,850.1	3,520.8	1,776.3	1,774.9	609.1	168.9	23,619.9	3.0
1996 <sup>4,5</sup>	7,938.0	3,599.6	1,793.6	1,778.7	601.6	164.2	23,781.3	3.0
1997 <sup>4,5</sup>	8,018.3	3,674.3	1,809.0	1,780.9	594.0	159.9	23,923.4	3.0

1. Excluding the Yukon Territory and Northwest Territories.

2. At June 1 and unadjusted for net census undercoverage.

3. Starting with the 1971 Census, the number of families excludes the families in collective households and in households outside Canada.

4. At July 1 and adjusted for net census undercoverage.

5. These estimates are based on 1991 Census counts adjusted for net census undercoverage.

Source: Statistics Canada, Catalogue no. 91-213-XPB.

6.7 Census Families by Size, Canada and the Provinces,<sup>1</sup> 1997

	All families	Family size					Persons in families	Average family size
		2	3	4	5	6 or more		
		thousands						number
<b>Canada</b>	<b>8,018.4</b>	<b>3,674.3</b>	<b>1,809.1</b>	<b>1,781.0</b>	<b>594.0</b>	<b>160.0</b>	<b>23.9</b>	<b>3.0</b>
Husband-wife families	6,946.5	3,032.2	1,487.7	1,695.6	576.2	154.8	21.1	3.1
Lone-parent families	1,071.8	642.1	321.4	85.4	17.8	5.1	2.7	2.5
<b>Newfoundland</b>	<b>159.3</b>	<b>55.7</b>	<b>43.2</b>	<b>44.4</b>	<b>13.0</b>	<b>1.2</b>	<b>495.7</b>	<b>3.1</b>
Husband-wife families	138.7	45.7	36.7	42.4	12.7	1.1	443.1	3.2
Lone-parent families	20.6	12.0	6.5	1.8	0.3	0.1	52.6	2.5
<b>Prince Edward Island</b>	<b>37.2</b>	<b>15.1</b>	<b>8.8</b>	<b>8.4</b>	<b>3.6</b>	<b>1.2</b>	<b>116.0</b>	<b>3.1</b>
Husband-wife families	32.1	12.1	7.4	7.9	3.5	1.1	103.0	3.2
Lone-parent families	5.0	3.0	1.4	0.5	0.1	--	13.0	2.6
<b>Nova Scotia</b>	<b>255.1</b>	<b>116.8</b>	<b>62.6</b>	<b>55.7</b>	<b>16.7</b>	<b>3.3</b>	<b>750.4</b>	<b>2.9</b>
Husband-wife families	219.2	94.9	52.0	53.0	16.1	3.1	660.0	3.0
Lone-parent families	35.9	21.9	10.6	2.7	0.6	0.2	90.4	2.5
<b>New Brunswick</b>	<b>213.9</b>	<b>94.8</b>	<b>53.4</b>	<b>50.0</b>	<b>13.6</b>	<b>2.0</b>	<b>631.6</b>	<b>3.0</b>
Husband-wife families	184.7	76.7	44.6	48.1	13.3	2.0	559.6	3.0
Lone-parent families	29.1	18.1	8.8	2.0	0.3	--	72.0	2.5
<b>Quebec</b>	<b>2,012.9</b>	<b>949.8</b>	<b>492.6</b>	<b>431.1</b>	<b>117.4</b>	<b>22.0</b>	<b>5,834.3</b>	<b>2.9</b>
Husband-wife families	1,728.1	764.9	410.8	415.5	115.4	21.6	5,143.7	3.0
Lone-parent families	284.8	184.9	81.8	15.6	2.0	0.5	690.7	2.4
<b>Ontario</b>	<b>3,001.0</b>	<b>1,340.4</b>	<b>675.7</b>	<b>689.5</b>	<b>232.6</b>	<b>62.7</b>	<b>9,046.0</b>	<b>3.0</b>
Husband-wife families	2,598.8	1,105.9	552.9	654.6	224.8	60.5	8,015.0	3.1
Lone-parent families	402.1	234.5	122.7	34.9	7.7	2.2	1,030.5	2.6
<b>Manitoba</b>	<b>298.9</b>	<b>135.8</b>	<b>63.0</b>	<b>65.6</b>	<b>25.8</b>	<b>8.7</b>	<b>908.4</b>	<b>3.0</b>
Husband-wife families	256.7	111.6	50.4	61.7	24.7	8.3	798.6	3.1
Lone-parent families	42.2	24.2	12.5	3.9	1.1	0.4	109.8	2.6
<b>Saskatchewan</b>	<b>266.1</b>	<b>122.8</b>	<b>50.5</b>	<b>54.5</b>	<b>27.2</b>	<b>11.0</b>	<b>822.3</b>	<b>3.1</b>
Husband-wife families	232.7	104.6	40.7	50.7	26.1	10.6	732.9	3.1
Lone-parent families	33.4	18.2	8.8	3.8	1.1	0.5	89.4	2.7
<b>Alberta</b>	<b>742.0</b>	<b>325.0</b>	<b>154.8</b>	<b>171.7</b>	<b>66.5</b>	<b>24.1</b>	<b>2,289.9</b>	<b>3.1</b>
Husband-wife families	644.2	271.3	124.2	161.4	64.0	23.4	2,032.4	3.2
Lone-parent families	97.8	53.7	30.5	10.3	2.4	0.8	257.5	2.6
<b>British Columbia</b>	<b>1,032.0</b>	<b>516.0</b>	<b>204.7</b>	<b>210.2</b>	<b>77.6</b>	<b>23.5</b>	<b>3,029.0</b>	<b>2.9</b>
Husband-wife families	911.1	444.5	167.9	200.3	75.4	23.0	2,722.3	3.0
Lone-parent families	121.0	71.5	36.8	9.9	2.1	0.5	306.7	2.5

1. July 1 estimates based on 1991 Census counts, adjusted for net census undercoverage.

Source: Statistics Canada, Demography Division.

## 6.8 Households

	All households	Household size					Average household size
		1	2	3	4	5 or more	
		thousands					number
<b>Canada</b>	<b>6,111</b>	<b>827</b>	<b>1,536</b>	<b>1,098</b>	<b>1,106</b>	<b>1,544</b>	<b>3.44</b>
1972	6,301	880	1,690	1,087	1,154	1,490	3.36
1973	6,513	972	1,762	1,126	1,201	1,452	3.28
1974	6,721	1,011	1,938	1,201	1,205	1,366	3.18
1975	6,949	1,096	1,949	1,195	1,331	1,378	3.15
1976	7,157	1,197	2,001	1,273	1,358	1,328	3.10
1977	7,357	1,286	2,083	1,287	1,422	1,279	3.03
1978	7,572	1,418	2,198	1,299	1,436	1,221	2.96
1979	7,787	1,442	2,266	1,394	1,483	1,202	2.93
1980	8,200	1,664	2,325	1,422	1,582	1,207	2.88
1981	8,336	1,712	2,369	1,506	1,595	1,154	2.85
1982	8,474	1,761	2,433	1,520	1,615	1,145	2.83
1983	8,618	1,812	2,487	1,555	1,664	1,100	2.80
1984	8,762	1,864	2,571	1,591	1,665	1,071	2.78
1985	8,909	1,918	2,610	1,636	1,703	1,042	2.73
1986	9,082	2,014	2,693	1,635	1,703	1,037	2.73
1987	9,244	2,089	2,790	1,601	1,717	1,047	2.71
1988	9,477	2,173	2,864	1,708	1,753	979	2.67
1989	9,624	2,224	2,966	1,701	1,727	1,006	2.66
1990	9,873	2,361	2,999	1,752	1,758	1,003	2.64
1991	10,056	2,445	3,077	1,735	1,766	1,033	2.63
1992	10,247	2,466	3,163	1,856	1,753	1,009	2.62
1993	10,387	2,535	3,145	1,832	1,903	972	2.62
1994	11,243	2,801	3,700	1,854	1,885	1,003	2.56
1995	11,412	2,803	3,784	1,943	1,870	1,013	2.55
1996	11,580	2,915	3,827	1,937	1,887	1,015	2.54
<b>1997</b>							
Newfoundland	199	33	61	43	43	18	2.81
Prince Edward Island	51	12	16	10	8	--	2.65
Nova Scotia	364	83	127	64	63	26	2.54
New Brunswick	285	58	97	56	53	17	2.62
Quebec	3,062	914	994	528	431	195	2.37
Ontario	4,227	945	1,384	720	766	413	2.65
Manitoba	429	116	138	72	63	40	2.51
Saskatchewan	392	109	130	58	57	36	2.48
Alberta	1,042	241	343	169	182	107	2.64
British Columbia	1,527	405	536	217	221	149	2.50

Source: Statistics Canada, Catalogue no. 64-202-XPB.



**6.9 Low Income<sup>1</sup>**

	1980	1989	1994	1995	1996
			%		
<b>Incidence of low income</b>					
<b>All people</b>	<b>16.0</b>	<b>14.1</b>	<b>17.1</b>	<b>17.8</b>	<b>17.9</b>
Children, under 18 years	15.8	15.3	19.5	21.0	21.1
Elderly, 65 years and older	34.0	22.4	19.3	18.7	20.8
All others	13.6	12.3	15.9	16.5	16.2
Persons in families	12.7	10.8	13.5	14.5	14.5
Children, under 18 years	15.8	15.3	19.5	21.0	21.1
Elderly, 65 years and older	17.8	8.9	6.1	6.9	7.6
All others	10.5	9.0	11.9	12.8	12.6
Unattached individuals	43.5	37.1	40.6	39.3	40.2
Elderly, 65 years and older	68.6	51.5	47.6	45.1	47.9
Non-elderly, under 65 years	34.5	31.7	38.0	37.2	37.1
			thousands		
<b>Estimated numbers</b>					
<b>All people</b>	<b>3,871</b>	<b>3,770</b>	<b>4,941</b>	<b>5,205</b>	<b>5,294</b>
Children, under 18 years	1,061	1,016	1,362	1,472	1,498
Elderly, 65 years and older	742	640	635	631	722
All others	2,068	2,114	2,944	3,101	3,074
Persons in families	2,718	2,527	3,381	3,684	3,707
Children, under 18 years	1,061	1,016	1,362	1,472	1,498
Elderly, 65 years and older	263	174	137	160	178
All others	1,394	1,337	1,882	2,051	2,031
Unattached individuals	1,153	1,243	1,559	1,520	1,587
Elderly, 65 years and older	479	466	497	471	544
Non-elderly, under 65 years	674	777	1,062	1,050	1,043
			%		
<b>Percent distribution</b>					
<b>All people</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Children, under 18 years	27.4	27.0	27.6	28.3	28.3
Elderly, 65 years and older	19.2	17.0	12.8	12.1	13.6
All others	53.4	56.1	59.6	59.6	58.1
Persons in families	70.2	67.0	68.4	70.8	70.0
Children, under 18 years	27.4	27.0	27.6	28.3	28.3
Elderly, 65 years and older	6.8	4.6	2.8	3.1	3.4
All others	36.0	35.5	38.1	39.4	38.4
Unattached individuals	29.8	33.0	31.6	29.2	30.0
Elderly, 65 years and older	12.4	12.4	10.1	9.0	10.3
Non-elderly, under 65 years	17.4	20.6	21.5	20.2	19.7

1. Estimates based on Low Income Cut-offs, 1992 base.

Source: Statistics Canada, Catalogue no. 13-207-XPB.

**6.10 Births by Mother's Legal Marital Status, 1997<sup>1</sup>**

	All births	Single	Married	Widowed	Divorced	Separated	Not stated
<b>Canada</b>	<b>378,011</b>	<b>97,945</b>	<b>240,718</b>	<b>431</b>	<b>5,961</b>	<b>1,283</b>	<b>31,673</b>
Newfoundland	5,859	1,388	3,648	6	40	32	745
Prince Edward Island	1,754	499	1,226	5	22	1	1
Nova Scotia	10,726	3,374	7,137	15	168	—	32
New Brunswick	8,563	2,971	5,432	10	147	—	3
Quebec	87,417	40,960	43,295	178	2,328	419	237
Ontario	146,263	21,205	98,965	95	743	2	25,253
Manitoba	16,113	5,077	10,592	12	240	174	18
Saskatchewan	13,499	4,473	8,339	19	290	1	377
Alberta	38,914	9,416	28,497	43	936	3	19
British Columbia	46,820	7,386	32,751	44	1,021	646	4,972
Yukon Territory	470	207	244	—	12	2	5
Northwest Territories	1,613	989	592	4	14	3	11

1. Calendar year.

Source: Statistics Canada, Catalogue no. 91-213-XPB.

**6.11 Perceptions of Time of Full-Time, Employed Individuals Aged 25-44, 1992**

	Men			Women		
	Unmarried <sup>1</sup> no children	Married no children	Married <sup>2</sup> with children	Unmarried <sup>1</sup> no children	Married no children	Married <sup>2</sup> with children
% affirmative responses						
Do you plan to slow down in the coming year?	19	20	20	19	30	29
Do you consider yourself a workaholic?	35	29	32	28	32	33
When you need more time, do you tend to cut back on your sleep?	56	45	57	48	48	55
At the end of the day, do you often feel that you have not accomplished what you had set out to do?	47	44	49	49	55	58
Do you worry that you don't spend enough time with your family or friends?	45	43	51	45	48	51
Do you feel that you're constantly under stress trying to accomplish more than you can handle?	35	35	39	40	38	52
Do you feel trapped in a daily routine?	44	30	34	35	43	48
Do you feel that you just don't have time for fun anymore?	28	26	36	34	41	52
Do you often feel under stress when you don't have enough time?	50	49	51	58	60	69
Would you like to spend more time alone?	23	25	26	20	31	46

1. Includes never married, divorced and widowed.

2. Includes legally married and common-law.

Source: Statistics Canada, General Social Survey, 1992.

## 6.12 Families by Income, 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
	%										
<b>All incomes</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under \$10,000	2.3	4.1	1.4	3.1	2.4	2.2	2.0	2.0	2.7	2.4	2.7
\$10,000–\$14,999	4.2	6.1	4.5	6.3	6.9	5.6	3.1	2.7	5.2	3.3	3.8
\$15,000–\$19,999	5.5	9.0	5.3	7.4	5.5	6.7	4.8	6.4	6.2	3.4	4.9
\$20,000–\$24,999	7.0	9.2	7.6	8.9	9.5	8.0	6.2	7.7	8.0	6.9	6.0
\$25,000–\$29,999	6.5	8.5	8.8	9.3	8.8	7.1	5.7	8.0	6.5	6.1	6.1
\$30,000–\$34,999	6.2	8.3	9.6	7.6	8.2	6.9	5.2	7.5	8.3	6.5	5.8
\$35,000–\$39,999	6.6	8.7	10.0	7.8	8.5	7.3	5.8	7.1	7.5	7.0	6.0
\$40,000–\$44,999	6.4	7.1	9.5	6.8	7.0	6.5	6.2	7.5	6.1	7.3	5.5
\$45,000–\$49,999	6.0	5.6	6.2	6.8	7.0	7.4	5.2	6.0	6.2	5.1	5.6
\$50,000–\$54,999	6.3	4.8	6.9	6.0	6.0	6.9	5.9	6.3	5.1	6.7	6.2
\$55,000–\$59,999	5.3	4.9	4.4	4.8	5.1	5.0	5.0	6.1	5.7	6.3	6.4
\$60,000–\$64,999	5.2	5.4	5.1	5.0	4.6	4.9	5.6	5.1	5.2	4.8	5.3
\$65,000–\$69,999	4.4	1.9	3.5	4.2	3.3	3.6	4.9	6.1	6.0	5.2	4.1
\$70,000–\$74,999	4.2	3.7	3.7	3.0	3.1	4.0	4.7	3.5	3.6	4.1	4.5
\$75,000–\$79,999	3.7	2.0	1.9	3.2	2.5	2.7	4.4	3.2	2.8	3.7	4.3
\$80,000–\$89,999	6.1	4.3	4.2	4.0	4.2	5.0	7.3	4.0	5.6	5.5	7.1
\$90,000–\$99,999	3.9	2.2	2.2	1.6	2.7	3.0	4.9	3.3	2.9	4.0	4.4
\$100,000 and over	10.1	4.3	5.3	4.2	4.6	7.2	13.2	7.5	6.5	11.6	11.1
	\$										
Average annual income	56,629	43,564	47,414	45,087	46,284	50,935	62,614	52,132	50,847	57,735	59,440
Median annual income	49,411	37,691	41,511	39,796	40,150	44,755	54,958	45,863	44,575	51,388	52,778
	number										
Number of families	8,317,000	164,000	38,000	272,000	221,000	2,081,000	3,164,000	302,000	274,000	752,000	1,048,000

Source: Statistics Canada, Catalogue no. 13-207-XPB.



## 6.13 Average Annual Income

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Average income														
\$ constant 1995														
<b>Economic families<sup>1</sup></b>	<b>53,103</b>	<b>52,931</b>	<b>54,289</b>	<b>55,294</b>	<b>55,998</b>	<b>57,227</b>	<b>58,910</b>	<b>58,005</b>	<b>56,623</b>	<b>56,312</b>	<b>55,154</b>	<b>56,188</b>	<b>56,091</b>	<b>56,629</b>
Elderly families <sup>2</sup>	36,673	39,180	39,582	39,627	38,277	39,321	44,197	43,519	42,708	41,308	42,083	41,693	43,578	42,759
Married couples only	33,558	35,294	34,826	36,339	34,683	35,241	40,347	39,707	38,328	37,696	38,867	38,773	39,454	39,588
All other elderly families	43,751	47,031	49,117	47,652	46,917	49,233	53,306	53,159	53,205	50,179	49,540	49,208	54,237	51,745
Non-elderly families <sup>3</sup>	55,490	55,049	56,617	57,807	58,844	60,175	61,351	60,426	59,017	58,962	57,445	58,757	58,392	59,032
Married couples only	53,708	53,006	54,088	54,705	56,100	57,959	57,099	57,349	56,990	59,098	56,122	56,176	56,496	56,674
One earner	44,757	41,962	45,058	44,456	45,278	49,836	48,426	47,806	43,806	44,886	45,763	45,319	44,668	47,026
Two earners	59,577	60,168	60,444	60,682	62,776	63,638	63,045	63,988	64,590	67,038	63,561	63,799	64,339	64,369
Two-parent families with children <sup>4</sup>	58,284	58,553	60,267	61,476	62,911	64,088	65,988	64,643	63,121	63,562	62,047	63,400	63,030	63,981
One earner	46,886	43,371	45,911	46,950	45,374	46,620	50,147	46,462	46,029	46,080	45,046	47,298	44,924	45,322
Two earners	60,359	61,469	61,585	62,816	63,626	64,618	64,884	64,679	64,027	65,359	63,542	65,483	65,532	66,241
Three or more earners	74,600	75,606	77,378	78,679	80,474	81,166	84,661	82,517	80,325	79,249	80,191	80,314	80,147	82,762
Married couples with other relatives <sup>5</sup>	73,593	71,777	75,229	79,156	77,875	79,976	81,904	82,948	78,718	78,176	78,176	79,447	77,507	81,183
Lone-parent families <sup>4</sup>	24,802	25,958	25,689	26,100	27,324	27,014	29,199	27,156	25,801	27,155	25,731	26,546	27,138	26,147
Male lone-parent families	37,880	40,217	38,933	39,829	48,610	42,712	50,031	40,680	39,673	41,906	36,121	36,179	37,041	39,428
Female lone-parent families	23,009	23,862	23,891	23,657	24,299	24,550	26,427	24,774	23,761	25,145	24,015	24,961	25,469	24,044
No earner	12,223	12,549	12,641	13,633	13,088	13,494	13,895	13,494	14,156	14,456	15,163	14,781	15,227	13,726
One earner	26,216	25,758	24,628	25,767	25,288	25,988	27,408	26,392	25,993	28,143	26,522	27,766	27,995	27,706
All other non-elderly families	41,349	43,554	43,303	46,184	45,532	46,837	48,479	48,386	46,954	42,805	44,872	46,557	45,588	48,814
<b>Unattached individuals</b>	<b>23,323</b>	<b>23,429</b>	<b>24,008</b>	<b>24,034</b>	<b>24,488</b>	<b>24,798</b>	<b>25,577</b>	<b>25,845</b>	<b>24,522</b>	<b>24,871</b>	<b>24,428</b>	<b>24,638</b>	<b>24,535</b>	<b>24,433</b>
Elderly	16,267	17,507	17,978	17,550	18,536	18,185	19,683	19,764	19,572	19,691	18,589	19,486	20,311	20,023
Male	19,238	20,786	21,160	18,901	20,881	21,245	23,330	22,566	21,990	23,276	21,657	24,676	24,126	25,020
Female	15,297	16,488	17,010	17,133	17,793	17,252	18,527	18,858	18,771	18,508	17,523	17,749	19,027	18,139
Non-elderly	25,960	25,479	26,087	26,295	26,590	27,238	27,755	28,152	26,341	26,732	26,644	26,566	26,097	26,217
Male	28,535	28,178	28,601	28,637	28,381	30,123	29,952	30,543	28,270	28,516	28,217	28,914	27,784	28,158
Female	22,597	21,996	22,665	23,212	24,210	23,447	24,891	24,841	23,764	24,138	24,316	23,142	23,775	23,432

1. An economic family is a group of individuals sharing a common dwelling unit who are related by blood, marriage (including common-law relationships) or adoption.

2. Head of family 65 years of age and over.

3. Head of family under 65 years of age.

4. With single children under 18 years of age. Children 18 years of age and over and/or other relatives may also be present.

5. Children under 18 years of age are not present, but children 18 years of age and over may be present.

Source: Statistics Canada, Catalogue no. 13-207-XPB.

## 6.14 Family and Unattached Individual Income

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
	Average income													
	\$ constant 1995													
<b>Economic families<sup>1</sup></b>	<b>44,628</b>	<b>43,939</b>	<b>43,814</b>	<b>44,673</b>	<b>44,945</b>	<b>44,904</b>	<b>45,888</b>	<b>46,827</b>	<b>45,834</b>	<b>44,710</b>	<b>44,774</b>	<b>43,879</b>	<b>44,441</b>	<b>44,286</b>
Elderly families <sup>2</sup>	34,846	32,799	34,579	35,046	35,016	33,698	34,493	37,482	37,193	36,157	35,461	35,940	35,614	36,878
Married couples only	32,290	30,074	31,516	31,096	32,290	30,778	31,088	34,046	34,035	32,678	32,565	33,256	33,166	33,544
All other elderly families	40,565	38,993	40,770	42,964	41,673	40,720	42,765	45,610	45,177	44,493	42,573	42,165	41,915	45,493
Non-elderly families <sup>3</sup>	46,070	45,558	45,235	46,197	46,536	46,704	47,764	48,378	47,278	46,182	46,418	45,270	46,005	45,649
Married couples only	43,298	43,428	43,017	43,622	43,078	43,874	45,332	44,545	44,225	43,898	45,824	43,426	43,505	43,645
One earner	35,888	36,113	34,672	36,806	35,734	36,064	38,448	38,055	36,680	34,225	35,897	35,939	35,609	34,928
Two earners	48,293	48,107	48,408	48,348	48,000	48,644	49,670	48,864	49,106	49,382	51,366	48,724	48,898	49,247
Two-parent families with children <sup>4</sup>	48,221	47,775	47,901	49,008	49,367	49,723	50,644	51,729	50,297	49,084	49,655	48,599	49,252	48,874
One earner	38,125	38,213	35,928	37,389	38,146	36,116	37,332	38,918	36,654	36,048	36,257	36,031	36,964	35,574
Two earners	48,588	49,220	49,744	49,793	50,032	49,988	50,644	50,644	50,064	49,540	50,730	49,306	50,470	50,296
Three or more earners	64,093	61,971	62,399	63,421	63,487	63,903	64,608	67,084	64,471	62,606	62,288	62,903	62,800	62,478
Married couples with other relatives <sup>5</sup>	63,227	60,281	59,321	61,367	63,503	62,127	63,894	64,832	64,990	61,937	61,883	61,644	62,218	60,670
Lone-parent families <sup>4</sup>	22,856	22,203	22,780	22,532	22,813	23,480	23,283	24,900	23,384	22,206	23,397	22,607	23,001	23,334
Male lone-parent families	34,211	32,464	32,555	32,552	32,877	38,545	33,532	38,457	32,370	31,153	33,002	29,756	28,929	29,545
Female lone-parent families	20,991	20,795	21,343	21,172	21,023	21,339	21,673	23,096	21,800	20,891	22,087	21,427	22,026	22,288
No earner	12,081	11,985	12,283	12,288	13,190	12,710	13,101	13,580	13,205	13,831	14,133	14,842	14,363	14,771
One earner	22,114	23,240	22,533	21,675	22,464	21,858	22,616	23,576	22,857	22,466	24,156	23,091	23,990	23,973
All other non-elderly families	38,928	35,254	37,018	36,796	38,118	37,646	38,666	39,757	39,508	38,501	35,545	36,813	37,929	37,312
<b>Unattached individuals</b>	<b>20,359</b>	<b>19,427</b>	<b>19,595</b>	<b>19,966</b>	<b>19,812</b>	<b>19,919</b>	<b>20,245</b>	<b>20,749</b>	<b>20,716</b>	<b>19,790</b>	<b>20,135</b>	<b>19,740</b>	<b>19,840</b>	<b>19,765</b>
Elderly	15,998	14,941	15,902	16,330	15,997	16,700	16,403	17,520	17,407	17,225	17,414	16,630	17,235	17,711
Male	19,384	17,184	17,939	18,699	17,074	18,404	18,654	20,163	19,274	18,880	19,937	18,829	20,600	20,371
Female	14,892	14,207	15,270	15,609	15,665	16,159	15,715	16,681	16,804	16,677	16,581	15,866	16,108	16,816
Non-elderly	21,849	21,104	20,873	21,220	21,143	21,056	21,664	21,943	21,971	20,731	21,114	20,920	20,815	20,525
Male	23,550	22,909	22,757	22,999	22,689	22,215	23,666	23,437	23,544	22,029	22,334	21,927	22,327	21,619
Female	19,726	18,748	18,440	18,799	19,106	19,516	19,029	19,994	19,794	18,997	19,339	19,429	18,610	19,018

1. An economic family is a group of individuals sharing a common dwelling unit who are related by blood, marriage (including common-law relationships) or adoption.

2. Head of family 65 years of age and over.

3. Head of family under 65 years of age.

4. With single children under 18 years of age. Children 18 years of age and over and/or other relatives may also be present.

5. Children under 18 years of age are not present, but children 18 years of age and over may be present.

Source: Statistics Canada, Catalogue no. 13-210-XPB.

## 6.15 Unattached Individuals by Income, 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
	%										
All incomes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under \$2,500	2.3	3.5	2.2	2.0	2.8	1.7	2.9	1.6	1.5	2.5	2.3
\$2,500-\$4,999	2.8	3.2	3.9	2.9	2.8	2.3	3.0	2.3	3.8	3.1	3.3
\$5,000-\$7,499	6.1	9.9	5.9	5.9	7.9	8.6	4.0	5.9	5.6	4.8	6.6
\$7,500-\$9,999	6.6	6.8	10.0	9.6	6.9	9.6	5.0	4.1	5.8	4.2	6.1
\$10,000-\$12,499	10.5	18.4	13.8	13.7	14.4	12.7	9.9	9.8	14.8	6.9	7.6
\$12,500-\$14,999	11.3	18.7	9.3	11.6	12.8	11.9	10.9	15.3	14.1	8.8	10.1
\$15,000-\$17,499	8.6	8.2	9.6	8.4	10.1	7.1	8.8	10.4	6.6	12.1	8.5
\$17,500-\$19,999	5.0	3.0	4.0	6.0	5.2	5.1	4.8	4.9	5.4	5.9	4.8
\$20,000-\$22,499	5.3	1.9	3.9	5.3	6.6	5.6	4.7	5.5	5.3	5.3	5.8
\$22,500-\$24,999	4.1	1.9	4.1	4.1	3.3	4.3	4.2	4.7	3.5	3.5	4.1
\$25,000-\$29,999	8.1	8.3	14.3	11.1	7.4	7.4	7.0	10.7	7.0	10.8	9.1
\$30,000-\$39,999	12.9	7.7	10.2	7.9	10.1	10.4	14.7	11.3	13.7	12.8	15.5
\$40,000-\$49,999	7.0	2.0	5.0	6.9	4.6	6.1	7.7	6.6	7.4	9.1	6.8
\$50,000 and over	9.3	6.5	3.8	4.6	5.1	7.1	12.4	7.0	5.6	10.2	9.4
	\$										
Average annual income	24,433	18,428	20,240	20,844	19,827	21,976	26,804	22,698	22,425	25,810	25,873
Median annual income	18,354	13,588	16,288	16,273	15,600	16,092	20,444	17,825	16,655	20,853	20,307
	number										
Number of individuals	3,944,000	42,000	18,000	113,000	80,000	1,140,000	1,283,000	149,000	138,000	374,000	608,000

Source: Statistics Canada, Catalogue no. 13-207-XPB.



## 6.16 Household Spending, 1996

	All households	Household annual income											
		Under \$10,000	\$10,000– \$14,999	\$15,000– \$19,999	\$20,000– \$24,999	\$25,000– \$29,999	\$30,000– \$34,999	\$35,000– \$39,999	\$40,000– \$49,999	\$50,000– \$59,999	\$60,000– \$69,999	\$70,000– \$89,999	\$90,000 and over
		\$											
<b>Average income before tax</b>	<b>51,453</b>	<b>7,286</b>	<b>12,631</b>	<b>17,401</b>	<b>22,366</b>	<b>27,462</b>	<b>32,420</b>	<b>37,314</b>	<b>44,722</b>	<b>54,552</b>	<b>64,793</b>	<b>78,362</b>	<b>131,533</b>
<b>Average expenditure per household</b>	<b>49,068</b>	<b>12,311</b>	<b>15,036</b>	<b>20,143</b>	<b>24,492</b>	<b>29,757</b>	<b>33,766</b>	<b>37,743</b>	<b>44,338</b>	<b>52,728</b>	<b>62,140</b>	<b>72,440</b>	<b>112,462</b>
Total current consumption	<b>34,024</b>	11,863	13,916	18,126	20,771	24,183	26,787	28,728	32,864	37,199	42,394	47,481	64,993
Food	<b>5,960</b>	2,474	2,881	3,518	4,155	4,602	5,033	5,272	6,062	6,559	7,107	8,033	10,076
Shelter	<b>8,477</b>	4,426	5,051	5,833	6,100	6,555	7,043	7,626	8,199	9,046	10,137	10,952	13,812
Principal accommodation	<b>7,974</b>	4,336	4,992	5,735	5,977	6,305	6,746	7,309	7,773	8,544	9,566	10,270	12,169
Rented living quarters	<b>2,351</b>	3,001	3,280	3,624	3,143	2,862	2,781	2,865	2,479	1,956	1,682	1,308	1,132
Owned living quarters	<b>4,075</b>	772	862	1,031	1,626	2,105	2,608	2,999	3,755	4,890	6,044	6,966	8,657
Water, fuel and electricity	<b>1,548</b>	563	850	1,080	1,208	1,339	1,356	1,445	1,539	1,697	1,840	1,996	2,380
Other accommodation	<b>504</b>	90	59	98	123	249	297	317	426	502	571	682	1,643
Household operation	<b>2,266</b>	839	1,019	1,278	1,472	1,678	1,771	1,821	2,125	2,407	2,711	3,099	4,438
Household furnishings and equipment	<b>1,294</b>	259	368	529	742	838	882	1,013	1,172	1,489	1,626	1,883	2,863
Household furnishings	<b>650</b>	152	188	245	338	339	412	505	524	727	792	960	1,614
Household equipment	<b>566</b>	93	156	251	373	447	422	453	580	686	738	802	1,061
Services related to furnishings and equipment	<b>58</b>	11	21	26	25	40	38	47	52	60	81	85	130
Clothing	<b>2,115</b>	427	615	840	1,036	1,230	1,442	1,570	1,988	2,302	2,649	3,195	4,858
Transportation	<b>6,044</b>	1,109	1,395	2,447	2,940	4,279	4,796	4,855	5,778	6,867	8,056	9,020	12,592
Private transportation	<b>5,526</b>	799	1,143	2,115	2,585	3,888	4,335	4,474	5,363	6,378	7,536	8,400	11,404
Public transportation	<b>518</b>	310	252	332	354	391	461	381	415	489	520	619	1,188
Health care	<b>1,006</b>	300	445	586	727	854	875	956	1,009	1,101	1,270	1,305	1,689
Personal care	<b>835</b>	270	341	466	557	581	702	703	839	915	1,045	1,137	1,534
Recreation	<b>2,638</b>	547	658	931	1,142	1,361	1,550	2,013	2,494	2,801	3,637	4,071	6,204
Reading materials and other printed matter	<b>252</b>	85	119	135	152	177	202	226	232	264	309	345	500
Education	<b>555</b>	242	159	217	277	274	404	283	416	569	638	773	1,545
Tobacco products and alcoholic beverages	<b>1,146</b>	484	527	733	807	979	1,024	1,193	1,140	1,331	1,337	1,554	1,718
Miscellaneous	<b>1,434</b>	400	337	612	665	774	1,063	1,199	1,411	1,548	1,871	2,114	3,164
Personal taxes	<b>10,746</b>	-22	321	838	2,157	3,072	4,420	5,851	7,672	10,713	13,943	17,865	37,058
Pensions, life and employment insurance	<b>2,598</b>	65	178	456	611	925	1,384	1,746	2,394	3,172	3,976	4,698	6,396
Gifts and contributions	<b>1,700</b>	405	621	723	954	1,578	1,176	1,418	1,408	1,644	1,827	2,396	4,015
Gifts, money and contributions to persons outside household	<b>379</b>	220	206	239	292	256	262	303	449	431	356	526	621

Source: Statistics Canada, Catalogue no. 62-555.

6.17 Household Spending, Canada and the Provinces,<sup>1</sup> 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
	number										
<b>Household Characteristics</b>											
Number of households in sample	10,417	452	448	845	690	1,579	2,474	629	938	854	1,508
Estimated number of households	10,900,500	187,880	48,730	335,150	269,160	2,843,120	4,032,520	416,880	363,840	970,000	1,433,230
Average household size	2.61	2.94	2.75	2.66	2.68	2.45	2.69	2.56	2.59	2.73	2.53
	Average expenditure per household \$										
<b>Expenditure Detail</b>											
Food	5,960	5,887	5,455	5,357	5,534	5,762	6,155	5,635	5,115	6,123	6,254
Shelter	8,477	5,812	7,140	6,928	6,148	7,169	9,907	7,219	6,195	8,193	9,384
Household operation	2,266	2,242	2,385	2,348	2,328	1,900	2,430	2,191	2,153	2,529	2,375
Household furnishings and equipment	1,294	1,273	1,160	1,127	1,242	1,094	1,350	1,237	1,207	1,603	1,418
Clothing	2,115	2,038	1,913	1,820	1,714	2,013	2,205	1,979	1,924	2,464	2,079
Transportation	6,044	5,673	6,034	5,581	5,624	4,882	6,741	5,778	5,849	6,603	6,372
Health care	1,006	919	1,062	948	937	952	859	986	1,082	1,461	1,243
Personal care	835	781	805	786	724	792	887	783	733	918	800
Recreation	2,638	2,178	2,202	2,271	2,297	2,139	2,816	2,468	2,388	3,396	2,952
Reading materials and other printed matter	252	195	237	231	211	234	269	268	225	271	254
Education	555	797	580	675	519	428	623	550	467	617	542
Tobacco products and alcoholic beverages	1,146	1,371	1,232	1,101	1,125	1,123	1,087	1,156	1,133	1,305	1,234
Miscellaneous	1,434	1,466	1,334	1,296	1,570	1,172	1,531	1,391	1,247	1,889	1,438
<b>Total current consumption</b>	<b>34,024</b>	<b>30,632</b>	<b>31,540</b>	<b>30,469</b>	<b>29,973</b>	<b>29,659</b>	<b>36,859</b>	<b>31,641</b>	<b>29,718</b>	<b>37,373</b>	<b>36,344</b>
Personal taxes	10,746	7,676	7,582	8,088	7,505	9,894	12,506	9,050	8,033	10,520	10,558
Personal insurance payments and pension contributions	2,598	2,224	2,449	2,280	2,476	2,414	2,798	2,592	2,417	2,845	2,435
Gifts and contributions	1,700	1,537	1,691	1,561	1,507	881	2,020	1,879	2,166	2,054	2,102
<b>Total expenditure</b>	<b>49,068</b>	<b>42,068</b>	<b>43,262</b>	<b>42,398</b>	<b>41,461</b>	<b>42,849</b>	<b>54,184</b>	<b>45,163</b>	<b>42,334</b>	<b>52,792</b>	<b>51,440</b>

1. Excludes the Yukon Territory and Northwest Territories.

Source: Statistics Canada, Household Surveys Division.

**6.18 Household Dwelling Features, 1997**

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
<b>Total households (thousands)</b>	<b>11,580</b>	<b>199</b>	<b>51</b>	<b>364</b>	<b>285</b>	<b>3,062</b>	<b>4,227</b>	<b>429</b>	<b>392</b>	<b>1,042</b>	<b>1,527</b>
<b>Average number of:</b>											
<b>Persons per household</b>	<b>2.54</b>	<b>2.81</b>	<b>2.65</b>	<b>2.54</b>	<b>2.62</b>	<b>2.37</b>	<b>2.65</b>	<b>2.51</b>	<b>2.48</b>	<b>2.64</b>	<b>2.50</b>
<b>Rooms per dwelling</b>	<b>5.89</b>	<b>6.45</b>	<b>6.02</b>	<b>6.07</b>	<b>5.97</b>	<b>5.34</b>	<b>6.09</b>	<b>5.72</b>	<b>6.06</b>	<b>6.36</b>	<b>6.00</b>
	% of households										
<b>Dwelling type</b>											
Single detached	56.7	72.4	70.6	68.1	71.2	44.0	58.2	70.2	73.7	64.6	57.0
Single attached	10.2	13.6	...	7.1	6.0	7.9	13.0	7.0	6.1	10.7	10.1
Apartment or flat	31.1	13.1	15.7	19.5	16.8	47.1	28.2	21.4	17.3	19.5	29.8
Mobile home	1.9	...	...	4.9	6.0	1.1	0.6	1.6	3.1	5.2	3.1
<b>Tenure</b>											
Owned	64.3	79.4	72.5	71.7	75.8	55.8	65.6	71.3	69.9	70.2	64.1
With mortgage	33.6	27.1	29.4	34.6	31.9	29.7	35.7	33.3	28.3	39.6	33.7
Without mortgage	30.7	52.3	45.1	37.1	43.9	26.1	29.9	38.0	41.8	30.5	30.3
Rented	35.7	20.6	27.5	28.3	24.2	44.2	34.4	28.7	30.1	29.8	36.0
<b>Dwelling repairs</b>											
Repairs needed	24.2	26.6	33.3	34.3	30.1	22.0	23.7	31.7	29.1	27.4	20.8
Major	8.0	9.5	9.8	14.8	14.0	8.2	7.1	10.3	9.2	7.9	6.7
Minor	16.2	17.1	23.5	19.5	16.1	13.8	16.6	21.4	19.9	19.5	14.1
No repairs needed	75.8	73.4	66.7	65.7	69.8	78.0	76.4	68.3	71.2	72.6	79.2
<b>Principal heating equipment</b>											
Steam or hot water furnace	13.9	9.5	52.9	33.0	10.2	11.2	13.2	7.9	14.5	15.0	17.6
Hot air furnace	52.8	31.6	37.3	37.0	29.5	18.5	69.5	68.8	82.2	83.9	53.7
Forced	51.2	29.6	37.3	36.5	27.7	16.3	68.0	65.5	81.9	83.3	52.3
Other	1.6	2.0	...	...	...	2.2	1.5	3.3	...	...	1.4
Heating stoves	2.8	8.5	...	6.6	6.3	4.0	1.7	...	...	...	3.2
Electric heating	30.3	49.7	...	23.1	54.0	66.3	15.3	21.7	2.6	...	25.2
<b>Principal heating fuel</b>											
Oil or other liquid fuel	13.1	32.2	84.3	62.4	24.2	16.6	11.0	3.3	4.8	...	6.8
Piped gas	47.9	...	...	...	...	6.5	66.8	60.1	87.2	96.5	59.9
Electricity	34.4	50.3	...	23.6	60.0	71.9	19.3	32.4	4.1	1.0	29.2
Wood	3.6	17.1	13.7	11.5	14.7	4.7	1.9	3.3	...	...	2.9
<b>Air conditioners</b>	<b>29.1</b>	<b>...</b>	<b>...</b>	<b>3.6</b>	<b>7.7</b>	<b>16.0</b>	<b>53.1</b>	<b>53.6</b>	<b>33.7</b>	<b>7.3</b>	<b>10.4</b>
Window	9.3	...	...	1.9	6.0	7.7	14.2	17.2	12.0	2.2	4.9
Central	19.8	...	...	1.6	1.4	8.3	38.9	36.4	21.7	5.0	5.5
<b>Fuel for cooking</b>											
Electricity	93.5	97.0	90.2	92.9	98.2	97.8	90.8	98.1	96.7	91.4	90.6
Piped gas	5.5	...	...	...	...	1.6	8.4	...	2.8	8.1	8.5
<b>Smoke detectors</b>	<b>96.1</b>	<b>96.0</b>	<b>98.0</b>	<b>97.5</b>	<b>95.4</b>	<b>97.2</b>	<b>96.7</b>	<b>94.9</b>	<b>96.7</b>	<b>96.3</b>	<b>92.1</b>
<b>Portable fire extinguishers</b>	<b>53.1</b>	<b>63.3</b>	<b>60.8</b>	<b>58.0</b>	<b>57.2</b>	<b>51.6</b>	<b>53.2</b>	<b>53.1</b>	<b>51.3</b>	<b>55.9</b>	<b>50.6</b>

Source: Statistics Canada, Catalogue no. 64-202-XPB.



## 6.19 Household Facilities and Equipment

	1982	1987	1992	1995	1996	1997
	% of households					
<b>Refrigerators</b>	<b>99.7</b>	<b>99.1</b>	<b>99.4</b>	<b>99.7</b>	<b>99.6</b>	<b>99.8</b>
One	84.6	83.2	80.9	80.4	79.4	80.3
Two or more	15.1	15.8	18.5	19.3	20.2	19.4
<b>Radios</b>	<b>98.7</b>	<b>98.8</b>	<b>98.8</b>	<b>98.9</b>	<b>98.7</b>	<b>98.7</b>
One	29.3	23.7	22.1	17.9	18.3	17.6
Two	31.6	30.0	28.1	25.6	25.0	25.2
Three or more	37.9	45.2	48.6	55.4	55.4	55.9
<b>Colour televisions</b>	<b>84.6</b>	<b>94.3</b>	<b>97.4</b>	<b>98.5</b>	<b>98.5</b>	<b>98.7</b>
One	72.6	66.8	55.4	48.8	47.1	46.8
Two or more	12.0	27.5	42.0	49.7	51.5	51.9
<b>Telephones</b>	<b>97.8</b>	<b>98.4</b>	<b>98.7</b>	<b>98.5</b>	<b>98.7</b>	<b>98.6</b>
One	59.7	41.5	28.9	24.2	24.2	24.1
Two	30.7	35.0	36.5	36.9	36.4	37.2
Three or more	7.5	21.9	33.4	37.5	38.1	37.3
<b>Owned vehicles</b>	<b>..</b>	<b>82.9</b>	<b>82.6</b>	<b>83.9</b>	<b>84.1</b>	<b>83.2</b>
Automobiles	80.3	78.3	76.1	74.5	73.9	72.4
One	52.3	53.4	52.0	52.9	53.5	52.3
Two or more	28.0	24.9	19.9	21.7	20.4	20.1
Vans and trucks	..	23.1	26.5	30.8	32.2	32.8
<b>Microwave ovens</b>	<b>10.2</b>	<b>42.9</b>	<b>75.6</b>	<b>83.4</b>	<b>85.3</b>	<b>86.3</b>
<b>Video cassette recorders</b>	<b>..</b>	<b>45.1</b>	<b>73.6</b>	<b>82.1</b>	<b>83.5</b>	<b>84.7</b>
One	..	..	64.1	66.0	64.9	64.4
Two or more	..	..	9.6	16.1	18.6	20.3
<b>Electric washing machines</b>	<b>76.7</b>	<b>75.6</b>	<b>77.7</b>	<b>79.2</b>	<b>79.6</b>	<b>79.7</b>
Automatic	66.1	70.2	75.0	77.6	78.0	78.4
Other	10.6	5.4	2.7	1.6	1.6	1.4
<b>Cassette or tape recorders</b>	<b>..</b>	<b>..</b>	<b>72.8</b>	<b>78.8</b>	<b>80.4</b>	<b>82.0</b>
<b>Clothes dryers</b>	<b>65.8</b>	<b>68.6</b>	<b>73.2</b>	<b>76.0</b>	<b>76.5</b>	<b>76.7</b>
<b>Cable television</b>	<b>59.1</b>	<b>67.7</b>	<b>71.5</b>	<b>73.4</b>	<b>74.0</b>	<b>73.7</b>
<b>Freezers</b>	<b>53.7</b>	<b>56.4</b>	<b>56.9</b>	<b>57.1</b>	<b>57.1</b>	<b>55.9</b>
<b>Gas barbecues</b>	<b>..</b>	<b>..</b>	<b>50.0</b>	<b>53.5</b>	<b>53.2</b>	<b>53.9</b>
<b>Compact disc players</b>	<b>..</b>	<b>..</b>	<b>27.1</b>	<b>47.4</b>	<b>53.4</b>	<b>58.1</b>
<b>Automatic dishwashers</b>	<b>32.7</b>	<b>39.1</b>	<b>43.7</b>	<b>47.1</b>	<b>47.7</b>	<b>48.5</b>
Built-in	..	27.9	35.0	39.9	41.2	42.3
Portable	..	11.2	8.7	7.2	6.6	6.3
<b>Home computers</b>	<b>..</b>	<b>..</b>	<b>20.0</b>	<b>28.8</b>	<b>31.6</b>	<b>36.0</b>
Modem	..	..	..	12.1	15.5	21.5
Internet	..	..	..	..	7.4	13.0
<b>Camcorders</b>	<b>..</b>	<b>..</b>	<b>10.1</b>	<b>14.9</b>	<b>16.1</b>	<b>17.7</b>
<b>Cellular telephones</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>14.1</b>	<b>18.6</b>
<b>Smoke detectors</b>	<b>..</b>	<b>76.5</b>	<b>89.8</b>	<b>95.0</b>	<b>95.7</b>	<b>96.1</b>
<b>Portable fire extinguishers</b>	<b>..</b>	<b>39.6</b>	<b>48.7</b>	<b>50.8</b>	<b>51.8</b>	<b>53.1</b>

Source: Statistics Canada, Catalogue no. 64-202-XPB.

## 6.20 Household Facilities and Equipment, Canada and the Provinces, 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
% of households											
<b>Refrigerators</b>	<b>99.8</b>	<b>99.5</b>	<b>100.0</b>	<b>99.2</b>	<b>99.6</b>	<b>99.8</b>	<b>99.9</b>	<b>97.9</b>	<b>100.0</b>	<b>100.0</b>	<b>99.9</b>
One	80.3	94.5	94.1	87.9	90.9	84.6	76.7	71.3	70.9	77.2	83.0
Two or more	19.4	5.0	...	11.3	8.8	15.2	23.2	26.6	29.3	22.8	17.0
<b>Radios</b>	<b>98.7</b>	<b>99.5</b>	<b>100.0</b>	<b>98.6</b>	<b>99.3</b>	<b>99.0</b>	<b>98.3</b>	<b>99.1</b>	<b>98.7</b>	<b>98.8</b>	<b>98.5</b>
One	17.6	17.1	17.6	15.4	17.5	23.8	16.0	15.2	14.8	12.5	14.9
Two	25.2	28.1	23.5	26.1	26.7	27.9	23.6	24.2	25.3	23.4	25.0
Three or more	55.9	54.3	60.8	57.1	55.1	47.3	58.7	59.6	58.4	62.8	58.6
<b>Colour televisions</b>	<b>98.7</b>	<b>99.0</b>	<b>100.0</b>	<b>98.1</b>	<b>98.9</b>	<b>99.3</b>	<b>98.9</b>	<b>97.2</b>	<b>98.7</b>	<b>98.1</b>	<b>98.2</b>
One	46.8	42.2	51.0	44.2	46.0	48.7	45.7	45.5	44.6	43.6	50.9
Two or more	51.9	56.8	49.0	53.6	53.0	50.6	53.3	51.7	54.1	54.5	47.3
<b>Telephones</b>	<b>98.6</b>	<b>96.5</b>	<b>98.0</b>	<b>97.0</b>	<b>98.6</b>	<b>98.0</b>	<b>98.9</b>	<b>97.9</b>	<b>98.0</b>	<b>99.2</b>	<b>98.4</b>
One	24.1	22.6	23.5	21.4	26.3	28.0	22.4	23.8	26.3	17.8	25.4
Two	37.2	39.7	45.1	38.5	41.8	39.2	34.8	36.6	40.8	37.2	37.4
Three or more	37.3	33.7	29.4	37.1	30.5	31.7	41.7	37.5	30.6	44.3	36.6
<b>Owned vehicles</b>	<b>83.2</b>	<b>79.9</b>	<b>90.2</b>	<b>81.9</b>	<b>85.3</b>	<b>78.6</b>	<b>83.5</b>	<b>82.8</b>	<b>87.0</b>	<b>90.8</b>	<b>85.5</b>
Automobiles	72.4	64.3	80.4	71.7	74.0	70.2	72.8	71.3	74.5	76.9	73.3
One	52.3	53.8	56.9	54.9	58.6	51.6	51.1	52.9	53.3	53.6	54.0
Two or more	20.1	11.1	23.5	16.7	15.5	18.7	21.7	18.4	20.9	23.3	19.3
Vans and trucks	32.8	37.7	37.3	33.5	40.0	21.4	31.7	39.9	43.1	48.7	41.3
<b>Microwave ovens</b>	<b>86.3</b>	<b>83.9</b>	<b>86.3</b>	<b>86.8</b>	<b>88.8</b>	<b>84.7</b>	<b>86.0</b>	<b>86.7</b>	<b>89.3</b>	<b>90.3</b>	<b>85.9</b>
<b>Video cassette recorders</b>	<b>84.7</b>	<b>85.4</b>	<b>82.4</b>	<b>84.9</b>	<b>85.6</b>	<b>80.4</b>	<b>86.5</b>	<b>82.5</b>	<b>82.7</b>	<b>88.4</b>	<b>86.8</b>
One	64.4	68.8	70.6	66.8	70.2	63.1	65.2	60.8	63.8	63.0	64.3
Two or more	20.3	16.6	11.8	18.1	15.4	17.3	21.3	21.7	18.9	25.4	22.5
<b>Electric washing machines</b>	<b>79.7</b>	<b>91.5</b>	<b>86.3</b>	<b>83.2</b>	<b>86.7</b>	<b>85.8</b>	<b>74.9</b>	<b>78.8</b>	<b>83.7</b>	<b>83.0</b>	<b>74.0</b>
Automatic	78.4	82.9	80.4	79.1	85.3	84.6	73.7	76.2	81.9	82.3	73.5
Other	1.4	8.5	...	4.1	1.4	1.1	1.2	2.6	2.0	...	0.5
<b>Cassette or tape recorders</b>	<b>82.0</b>	<b>83.4</b>	<b>80.4</b>	<b>85.2</b>	<b>86.3</b>	<b>78.2</b>	<b>81.8</b>	<b>81.4</b>	<b>82.1</b>	<b>85.6</b>	<b>86.4</b>
<b>Clothes dryers</b>	<b>76.7</b>	<b>82.9</b>	<b>76.5</b>	<b>76.1</b>	<b>83.5</b>	<b>81.8</b>	<b>72.2</b>	<b>76.9</b>	<b>82.7</b>	<b>82.2</b>	<b>71.8</b>
<b>Cable television</b>	<b>73.7</b>	<b>76.4</b>	<b>72.5</b>	<b>74.2</b>	<b>70.2</b>	<b>66.3</b>	<b>78.3</b>	<b>69.7</b>	<b>61.0</b>	<b>69.3</b>	<b>83.9</b>
<b>Freezers</b>	<b>55.9</b>	<b>76.9</b>	<b>70.6</b>	<b>63.7</b>	<b>67.4</b>	<b>43.3</b>	<b>56.0</b>	<b>71.6</b>	<b>76.8</b>	<b>68.4</b>	<b>55.4</b>
<b>Gas barbecues</b>	<b>53.9</b>	<b>58.3</b>	<b>60.8</b>	<b>56.9</b>	<b>55.4</b>	<b>45.6</b>	<b>55.0</b>	<b>61.1</b>	<b>64.0</b>	<b>64.8</b>	<b>53.8</b>
<b>Compact disc players</b>	<b>58.1</b>	<b>52.8</b>	<b>45.1</b>	<b>52.2</b>	<b>53.3</b>	<b>54.5</b>	<b>59.0</b>	<b>55.2</b>	<b>51.0</b>	<b>65.9</b>	<b>63.4</b>
<b>Automatic dishwashers</b>	<b>48.5</b>	<b>27.1</b>	<b>37.3</b>	<b>36.3</b>	<b>37.2</b>	<b>48.5</b>	<b>45.7</b>	<b>46.9</b>	<b>48.5</b>	<b>59.0</b>	<b>58.2</b>
Built-in	42.3	23.6	31.4	28.8	31.9	43.2	39.8	36.8	38.8	50.7	51.7
Portable	6.3	3.5	...	7.4	5.3	5.2	5.8	10.0	9.7	8.4	6.5
<b>Home computers</b>	<b>36.0</b>	<b>25.1</b>	<b>21.6</b>	<b>26.9</b>	<b>25.3</b>	<b>27.7</b>	<b>40.7</b>	<b>31.9</b>	<b>32.9</b>	<b>43.0</b>	<b>42.7</b>
Modem	21.5	16.1	13.7	16.8	16.5	14.9	25.0	20.0	17.3	26.0	26.9
<b>Camcorders</b>	<b>17.7</b>	<b>15.6</b>	<b>11.8</b>	<b>13.2</b>	<b>16.1</b>	<b>13.8</b>	<b>19.8</b>	<b>16.6</b>	<b>17.1</b>	<b>19.3</b>	<b>21.4</b>

Source: Statistics Canada, Catalogue no. 64-202-XPB.







## *The Labour Force*

### **C h a p t e r**

*It may have been delivering newspapers around the neighbourhood block, selling flowers from a roadside stand or slinging burgers at a fast-food outlet. It may be reminiscent of another era: glass milk bottles delivered by small city trucks, or heaps of dried grass pitched onto a horse-drawn hayrack. Regardless of the era or the work involved, the memories of our first job are often with us forever.*

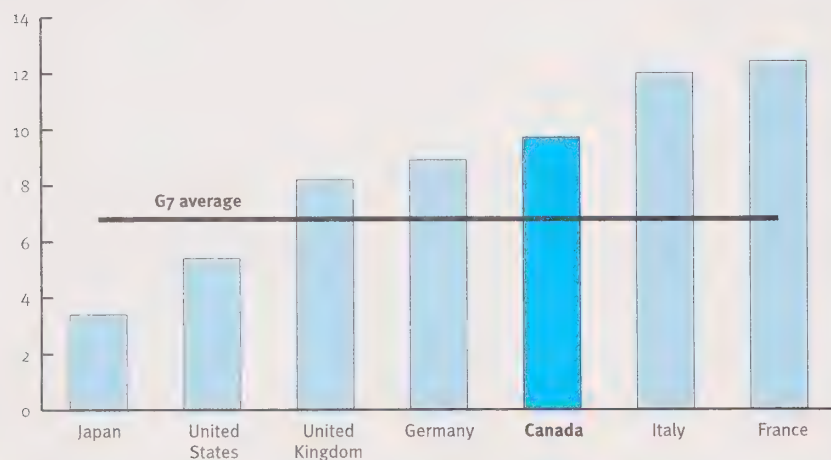
Seven

Their lasting impact shows the influence of work on our lives. Part of a coming of age, work provides for us both financially and socially. Today, many of us will spend more of our waking hours with co-workers than with our own families.

Work in Canada is changing. Many of us must now face employers' demands for greater skills in an economy driven by technology and knowledge. More and more of us now produce services rather than goods. All around us we see traditional, full-time jobs supplanted by temporary, part-time, casual or self-employed work. Many of us face pressures in balancing our work lives with our responsibilities at home.

#### Unemployment among Group of Seven countries

Unemployment rate in 1996



Source: *Quarterly Labour Force Statistics*, 1997, Organisation for Economic Co-operation and Development.

These factors affect all of us in different ways, depending on our age and gender. They have also changed, and are changing, our labour unions and many of the major programs of our social safety net.

## WORK IN CANADA

In late 1997, nearly one and a half million people were looking for work in Canada, while about 14 million were employed at some point during the year. Of those, 2.7 million people worked part time.

Although these figures reflect the vigorous growth of the late 1990s, they pale in comparison with the boom years of the 1980s. For example, between 1992 and 1997, the Canadian economy added 834,000 new jobs to its roster. In the late 1980s, on the other hand, it created places for an average 323,000 more workers each year. Canada's economic tides of recession and recovery have been the major forces against which employment figures ebb and flow.

With more of us at work, the unemployment rate dropped from a high of 11.9% in November 1992 to 8.6% in December 1997. However, depending on where you are in Canada, the employment picture will be different. Traditionally, the picture improves from east to west. In September 1997, the rate was at its highest in Newfoundland at 18.0% and at its lowest in Alberta at 5.6%.

Even with well over a million people looking for work, Canada's job creation record stands up well internationally. In September 1997, almost 60% of Canada's working-aged population was employed, a much higher percentage than in Europe, for example, where less than half the people old enough to work had jobs in 1996.

Also foremost on our employment record is the speed with which we are able to find new work, if we do lose our jobs. The percentage of Canadians who are off work for more than a year is much smaller than in most other industrialized countries, particularly those in Europe.

## The Goods on Services

In Canada, about 10 million people work in industries that provide services. These are the people behind cash registers, in front of schoolrooms or serving up beer and pizza. Another 3.8 million Canadians are at work in industries that produce goods such as cars, lumber, homes, diamonds and wheat.

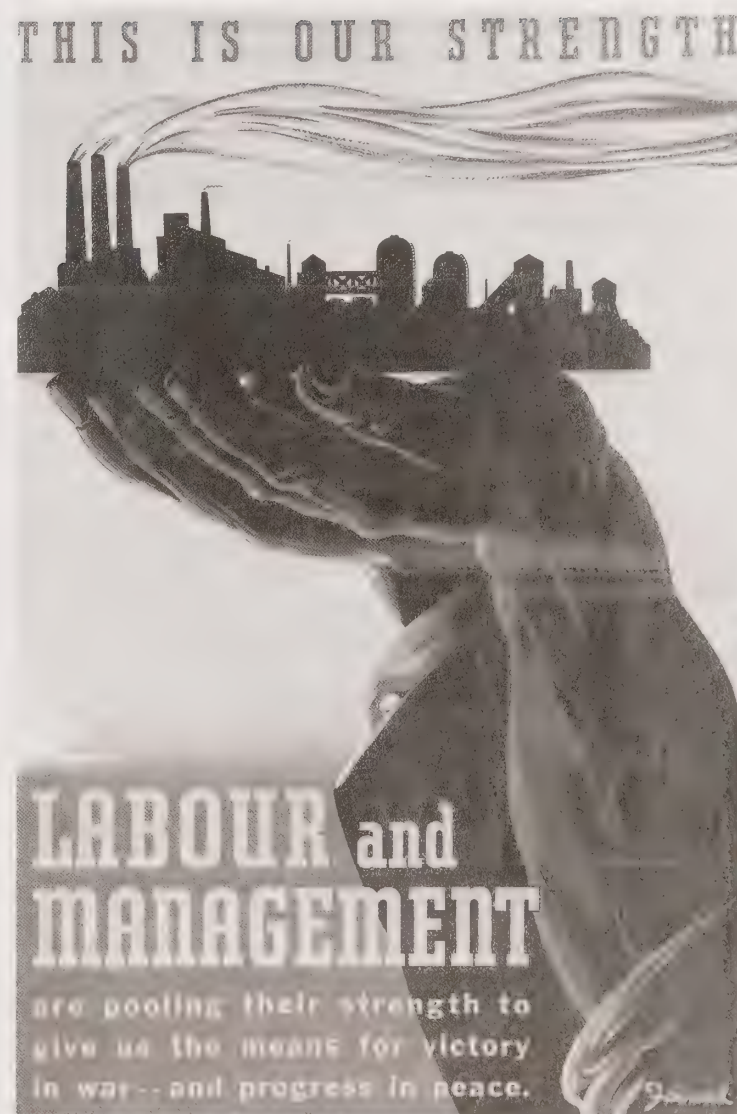
The growth of the service industries has been dramatic over the last four decades. In 1946, the service sector employed four of every 10 Canadian workers. Today, it employs more than seven out of every 10. From another perspective, between 1946 and 1995, the percentage of workers who farm, fish, mine or log has dropped from 29% to 5%. In just five decades, the share of workers in Canada's factories and construction sites has fallen from about one in three to one in five.

Now fewer in number, these Canadians depend much more on the health of the overall economy than do their colleagues in the service industries. Recessions cut demand for manufactured products and for the metals, forest products and other components that go into them. This generally means lost jobs in factories, mines and mills until economic recovery increases demand, which increases employment.

Between 1989 and 1992, Canada lost an average of 125,000 of its goods-producing jobs each year. From 1993 to 1996, the number of such jobs increased, at an annual average of 72,000.

While the number of jobs in the goods-producing sector goes up and down, the number of jobs in the service industries stays up in good times and bad, depending on the industry, although an exception to this is to be found in the government, which has been cutting back staff as a deficit-fighting measure. (Since late 1996, some 24,000 employees have been dropped from federal, provincial and municipal payrolls.)

The nature of work is a big factor in the size of earnings. In 1997, people at work in the petroleum and mining industries earned average



Work by Charles Fainmel, National Archives of Canada, C-87500





*Photo by William DeKay*

**Miners at the Hudson's Bay Mining and Smelting Company, Flin Flon, Manitoba.**

weekly paycheques of \$1,052, placing them at the top of the heap. Miners typically earn more than four times the base pay (not including tips) that workers in hotels and restaurants earn. The hospitality industry is typical of the fact that most of the lowest-paying industries are in the service sector.

Worthy of note is that Canada's biggest employer turns out to be small business. Two-thirds of Canadian wage-earners work for employers with fewer than 100 workers.

These small businesses often pay less than do the bigger companies. In September 1997, people in companies with fewer than 20 employees earned an average of \$462 a week, compared with those in companies with upwards of 500 workers who earned an average of \$778.

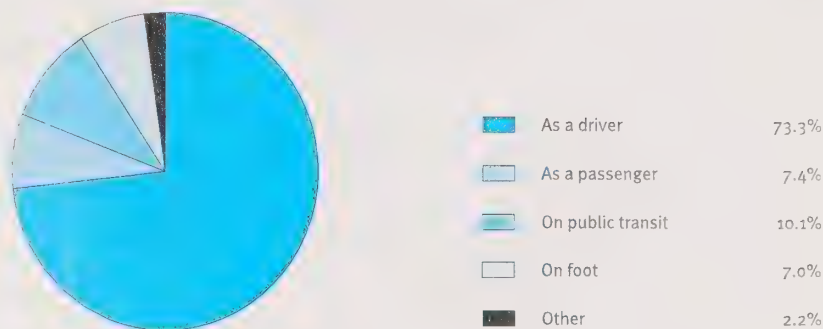
## UP THE LADDER

Canada has a generation of corporate leaders with no more than high school education. In true Horatio Alger style, they have worked their way up the ladder of success. Today, most of them wouldn't even be allowed a grab at a rung. Education and skills have become the password to Canada's competitive economy and above all education is the employer litmus test.

Much of this reflects the demands of modern working life. All around us, it is the skilled jobs that are the growth jobs in an era when knowledge is paramount. Increasingly, the skills that employers need go far beyond the ability to handle narrow tasks.

Employers now want people who bring a sense of vision and strength to their work. Between 1989 and 1996, more than 700,000 Canadians joined the managerial and administrative ranks—more than for any other type of work. At the same time, some traditional mainstays of our "Help Wanted" sections have shed strength. The steno pool is one example. Since 1989, the number of clerical workers has dropped from 2.2 million to 1.9 million. In comparison, manufacturing jobs are down from 1.8 million to 1.7 million.

How Canadians got to work in 1996



Source: Statistics Canada, 1996 Census.

If there is one bedrock skill, it is literacy. In Canada, if you have a high literacy level, not only are you more likely to be working, you are also more likely to have a higher income. The occupations that are growing the most in Canada are those that require high literacy levels. This is also true in countries such as the United States, Germany and Switzerland.

## Brave New World

Although urban folklore is full of college graduates who ask "Would you like fries with that?" and PhDs who drive cabs, there is a definite link between a good education and the ability to find skilled, high-paying jobs. During the 1990 to 1992 recession, the number of college and university graduates at work went up more than 200,000, even though the total number of Canadians working dropped by about 320,000.



This supports a long-term trend to a better-educated society and work force. In 1975, there were 2.3 million college and university graduates in the Canadian labour force; in 1996, there were 7.3 million. In 1975, there were 2 million people in the labour force with 8 years or less of school; in 1996, there were just 785,000.

Yet even with this more educated work force, many employers cannot find the people they need to fill certain skilled, high-paying jobs. The challenge has become global. Of note is that the number of information technology jobs vacant in Canada tops 16,000 and in the United States, it is more in the neighbourhood of 190,000.

In fact, our workplaces now pulse to the power of silicon chips. As true for the British Columbia millworker as for the call centre worker in Moncton, New Brunswick, the pervasive nature of computers is tellingly described by the data. In the mid-1970s, the world over, there were only about 50,000 computers. Today, that many are being installed every day.



*Canadian Auto Workers' Union (further details, see Appendix C)*

**Employees of the Kelsey Wheel plant, Windsor, Ont., 1938.**

The stenographer who took memos by dictation now seems part of a bygone era. In 1994, some 6.2 million Canadians used computers on the job, most of them professionals, managers and clerical workers. From 1996 to 1997, Internet access in workplaces more than doubled and about 25% of Canadian workers now have access to a wide array of cyberspace tools.

As with all new technologies, this "brave new world" has created some jobs, destroyed others and changed most of the rest. More than 75% of the jobs created as a result of new technologies have gone to managers, professionals or skilled and technical workers. Advanced technologies have also pushed skill levels up in some traditional jobs. At one time, some of us could muster the skills to fix our own cars on a Saturday morning. Today, certified automotive service technicians can command annual incomes of up to \$60,000 to deal with the computerized systems that run the modern minivan. That's just one example of how skills now required are far beyond the ken of the "weekend jobber."

## PART-TIMERS

For most Canadians, the tradition has been that a typical job is full-time, permanent, Monday to Friday, 9 to 5, and outside the home. By that standard, one of every three working Canadians had a typical job in 1995. Two out of three, on the other hand, made their living in other ways or in other time frames.

Part-time and temporary work were the most common types of "non-traditional" work. In a service economy, working schedules may be driven by certain realities (for example, more people come to restaurants at noon than at 2 p.m.). Since employers don't want to pay employees when there's not much work to do, flexible workers fit the bill.

Many of these workers find that these employer preferences also fit with their own. In 1997, more than two-thirds of Canada's 2.7 million part-time workers were voluntarily working these downscaled jobs. For most,



school was their first priority, while for many, it was young children.

Only about a third actually wanted full-time work but had settled for some hours instead of no hours at all. Young people make up almost one in three part-timers who would actually prefer full-time hours. Many of them reach their goal by holding down more than one job. They have become part of Canada's army of moonlighters, an army that included almost 700,000 people in 1996, about three times what it was 20 years ago.

Non-traditional forms of work often have one thing in common: limited benefits. For example, while 58% of full-time workers have access to employer pensions, only 19% of part-time workers will achieve an employer-sponsored retirement.

## **OVER-TIMERS**

Call it "burning the midnight oil." Call it a strong commitment to one's job. The fact is that some 10% of Canadian workers put in overtime and are not reimbursed either with extra pay or time off. In 1997, such unpaid overtime was most common for white-collar workers, especially teachers and managers. Blue-collar workers in manufacturing, mining, forestry, transportation and communications were generally more likely to be paid for their overtime hours.

Long work weeks are also common among the many Canadians who have created their own jobs. In 1997, about 2.5 million people worked for themselves compared with only 810,000 in 1975. Some industries offer more opportunity for self-employment than others. In agriculture, 61% of workers were self-employed, along with about a third each of construction workers and people who provide services to businesses, such as accountants.

Increasingly, women are choosing to work for themselves, although they still form a minority of self-employed people. Between 1986 and 1996, their share of these jobs grew by 74%, while men's share grew only 27%.

## **OK, Your Turn**

*In 1995, about 171,000 Canadians found one of the newest ways to balance work and their other interests: they shared their jobs with other workers.*

*Nurses and teachers lead this trend and overall, women. Many do it to meet family responsibilities, with almost half of all job sharers having children under 16.*

*Generally, job sharers are well-educated people in good jobs. In 1995, half had a college or university education and 40% were professionals. Unlike other part-time workers, job sharers have many benefits. Four of five are permanent employees, so they are more likely to have benefits such as health and dental plans and pension rights.*

*Canadian unions have added job-sharing clauses to many collective agreements and almost half of all medium and large non-union operations have followed.*

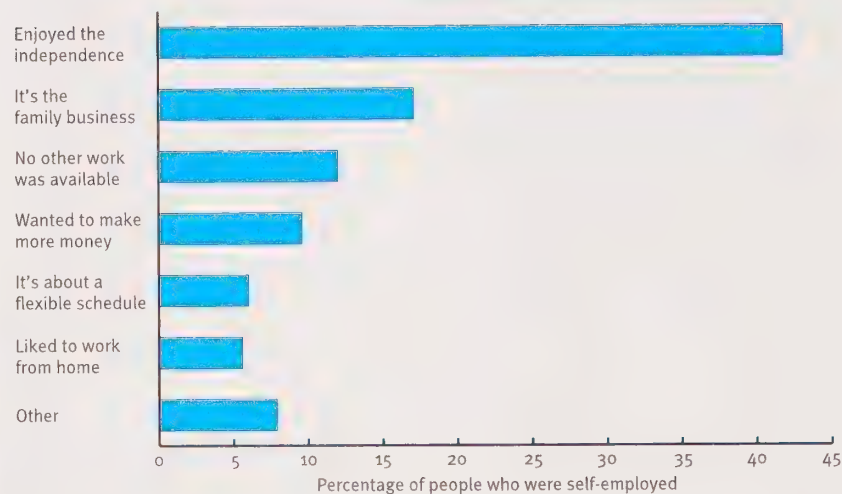
## A Note on Stress

"How would you like to have a job where, every time you make a mistake, a big red light goes on and 18,000 people boo?" said Jacques Plante when asked about the stress of his work as a goalie in the National Hockey League. While many of us might chuckle at Plante's idea of job stress, we have our own variations on the theme which have to do with the demand for higher productivity and the impact of new technologies on the job. In fact, fully a third of Canada's workers believe their jobs are not secure.



Ranchers on a cattle drive.

### Why Canadians were self-employed, 1995



Source: Statistics Canada, Catalogue no. 71-005-XPB.

In our working lives, stress comes from many sources. For example, about 55% of Canadian workers trace their job stress to a feeling of too much to do in too little time. One in four workers says that job stress interferes with family and personal relationships. This appears to be an issue especially for the "sandwich generation" (those baby boomers who now routinely carry the responsibility of care for children and aging parents at the same time).

However, despite such stresses, a life without work is even more difficult. Medical evidence has shown that unemployment is strongly linked to high death rates from heart disease and suicide.

## AGE AND WORK

A hundred years ago, child labour was a fact of life in many of Canada's factories. In 1889, a royal commission found children no older than 11 working around dangerous machinery. Thankfully, we now have laws to protect our children from such occurrences.

Ironically, today's young people are often not able to find work at all. In 1996, more than one out of every five Canadians between the ages of 15 and 24 had never held a job. The unemployment rate for this group is about 16%. High youth unemployment is not unique to Canada. The lack of jobs for the young is an international trend. Young people in many European countries face similar or higher levels of unemployment, while Canadian young people face a tougher time finding work than their American counterparts.

Still, there are many ways to improve one's chances of finding work. Since extra education usually means a job with higher wages, especially for college and university graduates, most are now in school for the duration.

Others are developing skills through apprenticeships and work experience programs. A 1994 survey found that not only were apprenticeship graduates much more likely to be working than people who had quit those programs, at an average of \$35,000 a year, they were earning 29% more as well.

At the other end of the spectrum, the guests of honour at retirement parties are getting younger. It used to be that most of us could expect to trade paycheques for pension cheques at the age of 65. Today, the proportion of retirees under age 60 is double the rate it was in the late 1970s: one-quarter of all new retirees are now between 55 and 59.

Canada's experience is typical of many countries around the world. Between 1975 and 1991, the number of working Canadians in their late fifties dropped 14% while in Australia, the equivalent drop was 20% and in the United States, 5%.

Early retirees are most likely to be public sector employees. These workers can look forward to long retirements given that they are generally retiring before their 60th birthdays. Only people who work in the phone, cable and other communications industries have a lower retirement age: 58 years.

Some employers have introduced incentives to early retirement as part of efforts to trim work forces. Public pension programs have also helped pull older Canadians from the labour force. In 1984, the Quebec Pension Plan reduced its minimum age requirement for retirement benefits to 60. The Canada Pension Plan followed suit in 1987.

Not everyone leaves working life willingly. Many older workers face a job market in which there is no alternative to retirement. In support of this, the most common reason that workers older than 45 give for ending their job search is their belief that no work is available. The facts are quite telling



Work by Clarence Gagnon (further details, see Appendix C)

**The Ice Harvest, Quebec, 1934**

Photo by L.E. Moore



## *H i r e   a n d   H i r e*

*In a time of concern about youth employment, Prince Edward Island shines as Canada's summer employment hot spot. Almost three of every four students on the island were at work during July 1996, well above the Canadian average of 52%.*

*P.E.I. shows how important student workers are to Canada's tourism industry. They point the way to Green Gables or Cavendish Beach, serve meals, make beds and mind the cash registers. These and similar jobs account for about half of Canada's 1 million student jobs each year. Another 25% of all student jobs are in retail.*

*Summer jobs have been caught in the same economic crunch that has affected the rest of Canada's labour market. The unemployment rate for students rose from an annual average of 11.2% in 1989 to 16.7% in 1997. Many who do find work are now more likely to get part-time jobs than in previous years. This tighter market is toughest on the youngest students. Now, only 32% of 15- and 16-year-olds work during the summer. In 1989, about twice that many had summer jobs.*

in this regard. From 1976 to 1994, the average time that unemployed 45- to 64-year-olds were out of work doubled from 17 weeks to 33 weeks. Currently, older workers looking for work have been unemployed for almost twice as long as young people aged 15 to 24.

In 1994, more than one-quarter of working men between the ages of 55 and 64 were self-employed. That percentage rose to 55% among men who were still working after the age of 65.

## **GENDER AND WORK**

The growing presence of women in the labour force has been one of the dominant trends in Canada's labour force since the 1950s. Before then, only one woman in six worked for pay outside the home and marriage usually dashed any hopes for a career. But in 1954, *The Financial Post* stated, "The woman's place is no longer in the home, and the Canadian home is no longer what it used to be." A prescient pronouncement: in 1996, women's share of employment in Canada was 46%.

Although the jobs are still largely clustered in the areas of clerical work and retail sales, women are gaining a much greater share of new highly skilled jobs than are men. Between 1989 and 1996, women filled some two-thirds of the 700,000 new managerial and professional jobs. Their only major area of job loss was in clerical work.

Yet women still face a substantial (but shrinking) wage gap with men as they move into full-time, skilled jobs. In 1995, women working full-time jobs earned an average \$29,700, while men earned an average \$40,610. Since 1977, women have increased their average earnings, while men have generally not.

Some groups are closer to equal earnings than others. In 1995, the groups most in sync were single men and women with university degrees in full-time jobs: the women earned 96% of the earnings of their male counterparts. Also, young women (those between the ages of 15 and 24)

earned 83% of what young men earned in 1995.

The world of work for Canadian men is more volatile than for women. From 1991 to 1996, men earned more, but were more likely to be unemployed. While women are drawing paycheques in record numbers, men are less likely to be working than in years past.

Men in Canada face more of a boom-and-bust job environment than do women. One important reason for this is that many men work in industries that produce goods. Of the 7.5 million men in Canada's labour force in 1996, more than 2.8 million worked in factories, mines and forests, and on construction sites. In the recession of the early 1990s, these industries lost 480,000 jobs. As late as 1996, a good 246,000 of these jobs were still nowhere to be seen.

During the 1990s, unemployment rates for men have been higher than for women, although the gap has slowly narrowed. Men have also reduced their participation in the labour force, with both younger and older men simply leaving the labour force since 1989. In 1996, some 18 out of every 100 men between the ages of 15 and 64 were neither working nor looking for work.

Young men face particular challenges in a world that has replaced the eager and the strong with machines. The days when one could quit school and land a low-skill job with a chance to work up the system are largely a story of the past. Today, machines have replaced many unskilled and semi-skilled workers in manufacturing.

## Labour Unions

About 3.5 million Canadians belong to unions in Canada today. In the last 30 years, a key trend has been the rise of public sector unions. In 1997, about 73% of workers in the public sector were union members. This is more than three times the rate among private sector workers. The

expanded importance of public sector unions has broadened the membership to include people from many lines of work. Although about one in three white-collar workers and four in 10 blue-collar workers are union members, half of Canada's professional and managerial workers, such as teachers and nurses, are also now in unions.

Workers in Newfoundland are most likely to be union members: about 40%. Quebec is close behind at 38%, but workers in Alberta are the least likely to belong to a union: just 23%.

Canada has an entirely different labour environment than its southern neighbour. About one in three Canadian paid workers holds a union card, compared with only one in six Americans. In Scandinavia, unions cover more than 75% of all paid workers. In Canada, they cover about 35%, which puts us somewhere in the middle of the industrialized countries.



Women shucking clams, Five Islands, Nova Scotia.

Photo by William DeKay

Despite our tough bargaining climate, the early 1990s in Canada was a quiet period for strikes and lockouts. Two things seem noteworthy: workers were less likely to take disputes to strike status in an unstable economy, and workplaces have improved as employers—sometimes with active union involvement—have begun to introduce new ways of working and partnerships.

In 1996, the number of days lost to strikes came close to pre-recession levels: 3.3 million. This is still well below the 9.1 million days a smaller Canadian labour force lost to lockouts and strikes in 1980.



Work by Bill Stapleton, Canadian Auto Workers' Union, Windsor

*Fleck Strike*

## SAFETY NET

In 1871, Canada's first prime minister, the Conservative Sir John A. Macdonald, watched his long-time Liberal rival, George Brown, try to break a typesetters' strike at *The Globe* in Toronto; Brown was employing old laws that declared unions illegal. To dish Brown and the Liberals, Macdonald's government promptly took a "we'll show you how to do this" attitude and brought in a new labour law that allowed unions to bargain for workers. That ended the strike.

Political jousting aside, Canadian labour law has evolved considerably since then. Provincial and territorial governments carry most of the responsibility for this area of law. Their laws cover all but a million of Canada's employees. The federal government carries the responsibility for its own employees and workers in industries that it regulates, such as banking, telecommunications and interprovincial transportation.

In recent years, governments have expanded workplace protection. For example, human rights laws combat discrimination in hiring, promotions and working conditions, and workers' compensation programs pay partial lost wages to sick and injured employees.

As Peter Gzowski has noted, "our social safety net . . . is the product of many factors: our history, our heritage, our need to huddle together against the cold." Although very telling when it comes to Canada's mix of laws, social programs and philosophy, changes in the economy have now pushed governments to a rigorous review of many of these programs.



## *D a n g e r o u s   O c c u p a t i o n s*

*For many Canadians, going to work in the morning can be risky business. In fact, those who trap or fish for a living, or who toil in the forest or deep underground, are at work in one of the three most dangerous industries in Canada: trapping and fishing, logging and forestry, and mining.*

*In an average year in Canada, about 1,000 workers will die in the course of, or as a result of, their employment. This means a fatality rate of seven deaths for every 100,000 workers. The good news is that this is considerably less than the average rate of 11 deaths for every 100,000 workers in the 1970s.*

*More specifically, in the late 1970s, trappers and fishers had a fatality rate of 182 deaths for every 100,000 workers, while the rate for loggers and foresters was 97 for every 100,000. For those in the mining industry—including those working on oil wells—the death rate was 79 for every 100,000 people. Although the most recent fatality rates for these three industries have decreased, they are still among Canada's highest.*

*On the other hand, working life appears to be relatively safe for police officers; on average, there are .1575 deaths for every 1,000 person-years of police work. Working*

*as a law enforcement officer is only marginally more dangerous than working as a biologist, an occupation in which there are .1570 deaths for every 1,000 person-years worked.*

*Information about job safety is collected by workers' compensation boards. But, in some cases, the data don't tell the whole story. For instance, the number of job-related deaths on Canadian farms is difficult to quantify because until the mid-1990s, information about agricultural workers was excluded from workers' compensation statistics.*

*In the United States, the fatality rate is*

*34 for every 100,000 agricultural workers, but 56 for every 100,000 farms.*

*Fatality rates are much higher among older workers. In physically demanding jobs, older workers generally don't have the same agility or strength as their younger colleagues.*

*There is also the cumulative effect of working in a hazardous environment. Between 1988 and 1993, one in five deaths accepted as work-related by workers' compensation boards and commissions across Canada was caused by exposure to harmful substances, including poisons,*

*chemicals, radiation and asbestos.*

*It may seem odd that the seventh most "dangerous" occupation in Canada is classed under "insulating occupations," but the dangerous nature of the job has little to do with day-to-day physical danger and everything to do with long-term exposure to asbestos. For those aged 65 and over, work-related exposure to harmful substances accounts for 55% of all work fatalities, even though most have already retired from the work force. For those under the age of 65, exposure to harmful substances accounts for 13% of all work fatalities.*

*Industry numbers can sometimes obscure the specifics. For instance, what are the most dangerous individual occupations within each industry? Compellingly, they all occur in mining. The three most dangerous occupations in Canada are, in order: the cutting and loading of rock, general mine labouring, and operating small rail engines.*

*White-collar workers hold the least dangerous jobs in Canada. Of all jobs based on the Standard Occupational Classification system, general office clerks are the least likely to die on the job.*

## Employment Insurance

There's a slang phrase in the language of the unemployed in Canada. Often we say Canadians without jobs are "on pokey." Many people in the Atlantic provinces still use the word "stamps" to describe the forms or weeks of work that make them eligible for unemployment, even though almost 30 years have passed since work was measured that way.

Our language of employment shows the importance of unemployment insurance in Canada, but the statistics tell another story. Our use of this support is dropping.

In 1996, Unemployment Insurance (UI), or Employment Insurance (EI) as it is now called, paid a total of \$13.1 billion in benefits, down sharply from \$19.3 billion in 1992. Fewer of us obtained these benefits. In 1996, an average 600,000 Canadians received regular UI or EI benefits in an average month, down from more than 1 million a month four years earlier.

One reason for the drop is that fewer of us are unemployed. Another is that the federal government has been steadily trimming benefits to unemployed workers since the 1970s. The maximum length for regular benefits is now 45 weeks, down from 51 weeks in the 1970s. Weekly benefits are normally 55% of a person's maximum weekly insurable earnings while employed, down from as much as 75% in the early 1970s.

The new EI offers employment benefits that are designed to help people return to work, such as incentives to support self-employment, and wage subsidies for employers. The federal government has turned control of many of these programs and services over to provincial governments.

Employment insurance, like UI before it, provides most of its benefits as temporary income to laid-off workers. In addition, many working Canadians can turn to EI for maternity and parental benefits if they are off work because of the birth or adoption of a child. Other benefits go to people who cannot work because of sickness. A special form of benefit goes to self-employed fishermen.

Employers and workers pay for EI, but not all wages are covered. Workers pay premiums on the first \$39,000 of wages. In 1998, some 2.7% of incomes went to EI premiums. Employers pay almost one and one-half times the employee premium as their share.

Under the most recent changes, between 420 to 700 hours of work are a prerequisite for regular EI benefits, depending on the local jobless rate. Even though most of us find new jobs quickly, others are unemployed for longer than their EI benefits will cover. This helps to explain why the percentage of unemployed Canadians who are eligible for UI or EI benefits has fallen over time. As recently as 1989, the average annual number of people getting regular UI benefits was 74% of the average annual number of unemployed Canadians. By 1996, this had fallen to 41%.

## RETIREMENT

Advertisements for retirement savings and insurance plans paint a picture of one's carefree golden years, usually in much warmer climates. These ads point to one of Canada's biggest social successes: reliable and comfortable incomes for Canadians over the age of 65.

In 1995, the average senior earned \$20,300, or \$84 for every \$100 earned by those of us who were still of working age. Comparatively, in 1951, the average senior earned slightly more than half the income of a working-aged Canadian. Rising incomes for seniors means there are now far fewer older Canadians with low incomes.

The Canada Pension Plan (CPP) and Quebec Pension Plan (QPP) have been a cornerstone of the retirement income system since their creation in 1966. The CPP is a federal government program covering all workers except those in Quebec, who rely on the Quebec government-run QPP. Both pension programs offer benefits based on previous earnings and all eligible workers pay into them, usually through payroll deductions. The CPP and the QPP have become important sources of retirement income; in



1997, they covered 3.2 million Canadians. They also offered benefits to 350,000 persons with disabilities and 1.3 million survivors of people who contributed to the plans that same year.

CPP and QPP retirement benefits cover up to 25% of our average earnings. In 1997, that meant Canadians could look forward to yearly benefits of up to \$8,842. There are many other programs that provide income to Canada's seniors, particularly the federal Old Age Security (OAS) and Guaranteed Income Supplement (GIS) benefits. Provincial governments have similar programs to supplement income from other sources.

These programs have become some of the largest single slices of the public spending pie. During its 1996–97 fiscal year, the federal government paid out \$38 billion in CPP, OAS and GIS benefits. Quebec distributed another \$3.4 billion in QPP benefits in 1996. Together, these pension payouts are almost triple the value of the pension spending in 1977.

## Private Pensions

Canadians are saving for retirement as never before. Almost two-thirds of us put away money for retirement. Not surprisingly, the more we earn, the more likely we are to save. Almost everyone with an income of \$40,000 or more places some money into an RRSP or RPP (Registered Pension Plan). Four out of five people who do not save have annual incomes of less than \$20,000.

We are changing how we save for retirement. We now rely more on RRSP savings instead of RPPs (for one thing, fewer of us are covered by employer pensions). In 1992, some 5.3 million Canadians were part of an employer pension plan; by 1996, only 5.1 million of us were covered.



*Detail of a photo by Pierre Gaudard, Canadian Museum of Contemporary Photography*

**The Port of Montréal, 1971, an image in a series called *Les ouvriers* (The Workers).**

## SOURCES

Department of Finance  
Human Resources Development Canada  
Organisation for Economic Co-operation and Development  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Income Distribution by Size in Canada.** Annual. 13-207-XPB
- **Earnings of Men and Women.** Annual. 13-217-XPB
- **Labour Force Information.** Monthly. 71-001-PPB
- **Labour Force Update.** Quarterly. 71-005-XPB
- **Historical Labour Force Statistics.** Annual. 71-201-XPB
- **Labour Force Annual Averages.** Annual. 71-220-XPB
- **Employment, Earnings and Hours.** Monthly. 72-002-XPB
- **Unemployment Insurance Statistics.** Annual Supplement. 73-202S
- **Canada's Retirement Income Programs: a Statistical Overview.** Occasional. 74-507-XPB
- **Retirement Savings through RPPs and RRSPs, 1991-1995.** 74F0002XPB
- **Perspectives on Labour and Income.** Quarterly. 75-001-XPE

Selected publications from other sources

- **Annual Report of the Canada Pension Plan 1995-1996.** Human Resources Development Canada.
- **Flexible Work Arrangements, Evidence from the 1991 and 1995 Survey of Work Arrangements.** Human Resources Development Canada. 1997.
- **Quarterly Labour Force Statistics.** Organisation for Economic Co-operation and Development.
- **Take on the Future: Canadian Youth in the World of Work.** Human Resources Development Canada. 1996.

## The Labour Force

### Legend

- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 7.1 Labour Force, Canada and the Provinces, 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
thousands											
<b>Population, age 15 and over</b>											
Both sexes	23,686.5	450.1	107.3	741.8	603.1	5,925.6	8,979.0	861.0	759.9	2,158.9	3,099.9
Men	11,629.5	223.1	52.3	358.0	295.2	2,899.4	4,395.4	422.0	374.4	1,079.6	1,530.2
Women	12,057.0	227.0	55.0	383.8	307.9	3,026.2	4,583.6	439.0	385.6	1,079.3	1,569.7
<b>Labour force</b>											
Both sexes	15,354.0	236.2	71.1	446.6	362.4	3,679.9	5,914.9	576.4	504.2	1,549.8	2,012.4
Men	8,428.0	132.5	38.1	241.1	199.0	2,045.7	3,222.1	314.0	279.7	856.5	1,099.2
Women	6,926.0	103.7	33.0	205.4	163.4	1,634.2	2,692.7	262.4	224.6	693.4	913.3
<b>Employed</b>											
Both sexes	13,940.6	191.9	60.5	391.9	316.1	3,260.3	5,412.9	538.3	474.2	1,456.9	1,837.7
Men	7,648.8	106.1	32.1	208.8	172.0	1,802.8	2,962.7	293.4	262.3	807.2	1,001.4
Women	6,291.7	85.8	28.4	183.0	144.1	1,457.5	2,450.2	244.8	211.9	649.7	836.3
<b>Unemployed</b>											
Both sexes	1,413.5	44.3	10.6	54.7	46.4	419.6	502.0	38.2	30.0	92.9	174.8
Men	779.1	26.4	6.0	32.3	27.0	243.0	259.4	20.6	17.4	49.3	97.8
Women	634.3	17.9	4.6	22.4	19.4	176.7	242.6	17.5	12.7	43.6	76.9
<b>Not in the labour force</b>											
Both sexes	8,332.5	213.9	36.2	295.2	240.6	2,245.6	3,064.1	284.6	255.7	609.1	1,087.4
Men	3,201.5	90.6	14.2	116.9	96.1	853.6	1,173.3	108.0	94.7	223.1	431.0
Women	5,131.0	123.3	22.0	178.3	144.5	1,392.0	1,890.8	176.6	161.0	386.0	656.4
%											
<b>Participation rate</b>											
Both sexes	64.8	52.5	66.3	60.2	60.1	62.1	65.9	66.9	66.4	71.8	64.9
Men	72.5	59.4	72.8	67.3	67.4	70.6	73.3	74.4	74.7	79.3	71.8
Women	57.4	45.7	60.0	53.5	53.1	54.0	58.7	59.8	58.2	64.2	58.2
<b>Unemployment rate</b>											
Both sexes	9.2	18.8	14.9	12.2	12.8	11.4	8.5	6.6	6.0	6.0	8.7
Men	9.2	19.9	15.7	13.4	13.6	11.9	8.1	6.6	6.2	5.8	8.9
Women	9.2	17.3	13.9	10.9	11.9	10.8	9.0	6.7	5.7	6.3	8.4
<b>Employment rate</b>											
Both sexes	58.9	42.6	56.4	52.8	52.4	55.0	60.3	62.5	62.4	67.5	59.3
Men	65.8	47.6	61.4	58.3	58.3	62.2	67.4	69.5	70.1	74.8	65.4
Women	52.2	37.8	51.6	47.7	46.8	48.2	53.5	55.8	55.0	60.2	53.3

Source: Statistics Canada, Catalogue no. 71F0004-XCB.



## 7.2 Labour Force and Participation Rates

	Labour force			Participation rates by age group									
				15 and over		15-24		25-44		45-64		65 and over	
	Both sexes	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
	thousands			%									
1976	10,530	6,588	3,942	77.8	45.6	68.4	57.5	95.5	54.0	85.6	40.9	16.0	4.2
1981	12,332	7,322	5,010	78.7	52.3	72.8	64.0	95.5	65.7	84.8	45.2	14.1	4.5
1986	13,378	7,656	5,721	77.1	55.8	71.9	66.5	94.5	73.3	80.9	47.4	11.8	3.7
1991	14,408	7,970	6,438	75.1	58.5	69.1	65.5	93.1	77.9	78.3	54.5	11.3	3.5
1992	14,482	7,997	6,485	74.0	58.0	67.0	63.6	92.2	77.0	78.0	55.9	10.9	3.6
1993	14,663	8,078	6,585	73.5	57.9	65.5	61.5	92.2	77.4	77.7	56.8	10.2	3.7
1994	14,832	8,174	6,658	73.3	57.6	65.2	60.6	91.9	77.2	77.7	57.3	11.0	3.5
1995	14,928	8,198	6,730	72.5	57.4	63.9	60.4	91.7	77.3	77.1	57.4	10.1	3.3
1996	15,145	8,301	6,844	72.4	57.6	63.5	59.5	91.8	78.1	77.3	57.8	10.3	3.5
1997	15,354	8,428	6,926	72.5	57.4	63.4	59.0	92.0	78.2	77.8	58.1	10.2	3.5

Source: Statistics Canada, CANSIM, matrix 3472.

## 7.3 Workers by Earnings Class, 1996

	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.
	%										
<b>Earnings class</b>											
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under \$5,000	15.3	20.3	20.4	22.3	19.7	13.6	14.9	15.0	18.3	16.7	14.8
\$5,000-\$9,999	11.3	17.6	17.1	13.5	15.2	11.3	10.5	12.8	12.6	11.2	10.5
\$10,000-\$14,999	9.8	13.2	12.3	10.8	13.0	10.3	8.7	10.5	11.2	9.6	10.0
\$15,000-\$19,999	8.7	8.2	8.4	9.7	8.7	10.3	7.7	10.4	9.1	7.9	8.6
\$20,000-\$24,999	8.7	8.2	10.5	8.6	9.8	9.3	7.8	10.4	8.8	10.0	8.1
\$25,000-\$29,999	8.4	5.9	10.2	8.3	6.9	9.8	8.0	9.4	9.3	7.9	7.8
\$30,000-\$34,999	8.1	6.5	5.4	7.0	5.8	8.4	8.2	8.3	7.4	8.0	8.3
\$35,000-\$39,999	6.4	5.9	4.4	4.4	5.4	6.0	6.9	5.6	5.9	6.5	6.9
\$40,000-\$44,999	5.5	3.3	3.0	5.0	4.4	5.7	6.0	4.9	4.7	5.1	5.4
\$45,000-\$49,999	3.8	2.1	3.0	2.8	3.3	3.1	4.4	2.7	3.8	3.5	4.9
\$50,000-\$59,999	6.3	4.3	2.5	4.1	3.9	6.3	7.3	5.0	3.9	6.1	6.1
\$60,000 and over	7.7	4.5	2.9	3.6	3.8	6.0	9.7	5.0	5.0	7.6	8.6
Average earnings (\$)	27,089	20,589	19,333	20,918	21,173	26,135	29,295	24,155	23,304	26,256	28,514
Median earnings (\$)	22,859	14,601	15,151	16,770	16,247	22,402	25,263	20,598	19,342	22,355	23,771
Estimated numbers (thousands)	15,944	263	78	474	403	3,791	6,087	599	539	1,623	2,085

Source: Statistics Canada, Catalogue no. 13-217-XPB.

## 7.4 Labour Force Characteristics, by Age, 1997

	Population	Labour force <sup>1</sup>	Employment	Unemployment	Not in labour force	Participation rate <sup>2</sup>	Unemployment rate <sup>3</sup>	Employment rate
			thousands				%	
<b>Both sexes</b>	<b>23,687</b>	<b>15,354</b>	<b>13,941</b>	<b>1,414</b>	<b>8,333</b>	<b>64.8</b>	<b>9.2</b>	<b>58.9</b>
15-24	3,972	2,431	2,025	406	1,541	61.2	16.7	51.0
15-19	1,982	928	726	202	1,055	46.8	21.8	36.6
20-24	1,990	1,504	1,300	204	486	75.6	13.6	65.3
25 and over	19,715	12,923	11,915	1,008	6,792	65.5	7.8	60.4
25-44	9,744	8,297	7,600	697	1,447	85.1	8.4	78.0
25-34	4,663	3,943	3,584	359	719	84.6	9.1	76.9
35-44	5,081	4,354	4,016	338	728	85.7	7.8	79.0
45-64	6,486	4,403	4,099	304	2,083	67.9	6.9	63.2
45-54	3,928	3,166	2,956	210	762	80.6	6.6	75.2
55-64	2,559	1,238	1,144	94	1,321	48.4	7.6	44.7
65 and over	3,484	223	216	7	3,262	6.4	3.1	6.2
55 and over	6,043	1,460	1,359	101	4,583	24.2	6.9	22.5
<b>Men</b>	<b>11,630</b>	<b>8,428</b>	<b>7,649</b>	<b>779</b>	<b>3,202</b>	<b>72.5</b>	<b>9.2</b>	<b>65.8</b>
15-24	2,020	1,280	1,055	225	740	63.4	17.6	52.2
15-19	1,015	483	373	110	532	47.6	22.8	36.8
20-24	1,005	797	682	115	209	79.2	14.4	67.8
25 and over	9,609	7,148	6,594	554	2,461	74.4	7.8	68.6
25-44	4,873	4,486	4,106	379	388	92.0	8.5	84.3
25-34	2,336	2,136	1,935	202	200	91.4	9.4	82.8
35-44	2,537	2,349	2,172	178	188	92.6	7.6	85.6
45-64	3,226	2,509	2,338	171	718	77.8	6.8	72.5
45-54	1,964	1,744	1,630	114	221	88.8	6.5	83.0
55-64	1,262	765	708	57	497	60.6	7.5	56.1
65 and over	1,510	154	149	4	1,356	10.2	2.9	9.9
55 and over	2,772	919	857	61	1,853	33.1	6.7	30.9
<b>Women</b>	<b>12,057</b>	<b>6,926</b>	<b>6,292</b>	<b>634</b>	<b>5,131</b>	<b>57.4</b>	<b>9.2</b>	<b>52.2</b>
15-24	1,952	1,151	970	181	800	59.0	15.7	49.7
15-19	967	444	353	92	523	45.9	20.7	36.4
20-24	984	707	618	89	277	71.8	12.6	62.8
25 and over	10,105	5,775	5,321	453	4,331	57.1	7.8	52.7
25-44	4,871	3,811	3,494	318	1,059	78.2	8.3	71.7
25-34	2,326	1,807	1,649	157	519	77.7	8.7	70.9
35-44	2,545	2,005	1,844	160	540	78.8	8.0	72.5
45-64	3,260	1,895	1,761	133	1,365	58.1	7.0	54.0
45-54	1,963	1,422	1,326	96	542	72.4	6.8	67.5
55-64	1,297	473	436	37	824	36.5	7.8	33.6
65 and over	1,975	69	66	2	1,906	3.5	3.5	3.4
55 and over	3,271	542	502	40	2,730	16.6	7.3	15.3

1. The labour force is composed of those members of the civilian non-institutional population 15 years of age and over who, during the reference week, were employed or unemployed.

2. The participation rate represents the labour force expressed as a percentage of the population 15 years of age and over. The participation rate for a particular group (age, sex, marital status, etc.) is the labour force in that group expressed as a percentage of the population for that group.

3. The unemployment rate represents the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex, marital status, etc.) is the number unemployed in that group expressed as a percentage of the labour force for that group.

Source: Statistics Canada, CANSIM, matrix 3472.

## 7.5 Participation and Unemployment Rates, International Comparisons, 1996

	Canada	United States <sup>1</sup>	Japan	Australia	New Zealand	France	Spain	Sweden <sup>1</sup>	United Kingdom <sup>1</sup>
	%								
<b>Participation rate<sup>2</sup></b>									
<b>Both sexes</b>	<b>75.9</b>	<b>79.3</b>	<b>77.3</b>	<b>74.7</b>	<b>76.9</b>	<b>67.8</b>	<b>61.8</b>	<b>79.0</b>	<b>77.3</b>
Men	83.1	87.0	91.6	84.8	85.8	75.0	76.4	81.6	86.1
15–24 years	63.5	68.8	48.9	72.9	70.9	32.4	47.1	48.9	75.3
25–54 years	91.0	91.8	97.7	91.5	92.0	95.2	92.6	90.0	91.9
55–64 years	59.3	67.0	84.9	60.3	69.0	42.3	56.3	72.2	62.9
65 years and over	10.3	16.9	36.7	9.3	10.9	2.6	2.7	11.9	7.6
Women	68.7	72.0	62.8	64.4	68.0	60.7	47.4	76.3	68.4
15–24 years	59.5	62.2	47.6	67.6	64.0	25.9	41.4	46.7	65.8
25–54 years	76.4	76.1	65.8	68.8	73.2	77.8	56.8	85.8	74.5
55–64 years	39.6	49.6	48.8	31.3	42.8	31.3	20.2	65.0	40.2
65 years and over	3.5	8.6	15.4	2.7	3.2	1.3	1.2	4.5	3.1
<b>Unemployment Rate</b>									
<b>Both sexes</b>	<b>9.7</b>	<b>5.4</b>	<b>3.4</b>	<b>8.5</b>	<b>6.1</b>	<b>12.1</b>	<b>22.2</b>	<b>8.0</b>	<b>8.2</b>
Men	9.9	5.4	3.4	8.9	6.1	10.4	17.6	8.4	9.7
15–24 years	17.5	12.6	6.8	15.4	12.3	22.1	36.3	16.7	17.8
25–54 years	8.7	4.2	2.5	7.2	4.7	9.3	14.9	7.4	8.0
55–64 years	7.8	3.3	5.1	..	4.3	8.6	11.4	8.6	9.5
65 years and over	3.5	3.4	2.1	..	0.5	0.0	1.0	2.1	4.1
Women	9.4	5.4	3.4	8.0	6.1	14.2	29.6	7.4	6.3
15–24 years	14.6	11.3	6.7	14.1	11.0	31.9	48.8	14.5	11.1
25–54 years	8.5	4.4	3.2	6.4	5.1	13.0	26.3	6.7	5.6
55–64 years	7.6	3.4	2.3	..	2.7	8.2	12.1	6.5	3.4
65 years and over	4.5	4.0	0.6	..	2.8	0.6	1.9	–	2.0

1. Estimates are for people aged 16 and older.

2. The participation rate for all ages is defined as the total (or civilian) labour force for all ages divided by the total population for ages 15–64.

Source: Organisation for Economic Co-operation and Development, *Labour Force Statistics 1976–1996*, Paris, 1996.



## 7.6 Employment, by Industry

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	thousands									
<b>All industries</b>	<b>12,819</b>	<b>13,086</b>	<b>13,165</b>	<b>12,916</b>	<b>12,842</b>	<b>13,015</b>	<b>13,292</b>	<b>13,506</b>	<b>13,676</b>	<b>13,941</b>
Agriculture	451	438	441	457	437	450	425	431	453	423
Other primary industries	307	304	298	295	267	260	277	296	280	292
Manufacturing	2,214	2,235	2,105	1,956	1,879	1,893	1,949	2,061	2,083	2,167
Construction	765	809	824	732	717	694	750	724	719	747
Transportation, communications and other utilities	951	1,008	995	961	971	961	978	1,033	1,020	1,037
Trade	2,272	2,293	2,356	2,276	2,267	2,253	2,314	2,307	2,361	2,386
Finance, insurance and real estate	763	769	790	794	804	810	788	809	800	795
Service	4,244	4,351	4,487	4,572	4,621	4,790	4,932	5,036	5,141	5,303
Public administration	850	879	869	873	879	903	877	810	820	791
Goods-producing industries	3,873	3,928	3,809	3,582	3,457	3,448	3,545	3,653	3,681	3,768.6
Service-producing industries	8,946	9,158	9,356	9,334	9,385	9,567	9,746	9,852	9,995	10,171.9
	% of total employment									
Goods-producing industries	30.2	30.0	28.9	27.7	26.9	26.5	26.7	27.0	26.9	27.0
Service-producing industries	69.8	70.0	71.1	72.3	73.1	73.5	73.3	73.0	73.1	72.9

Source: Statistics Canada, Catalogue no. 71-201-XPB.

## 7.7 Distribution of Employed People, by Industry, Canada and the Provinces, 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
	thousands										
<b>All industries</b>	<b>13,940.6</b>	<b>191.9</b>	<b>60.5</b>	<b>391.9</b>	<b>316.1</b>	<b>3,260.3</b>	<b>5,412.9</b>	<b>538.3</b>	<b>474.2</b>	<b>1,456.9</b>	<b>1,837.7</b>
<b>Goods-producing industries</b>	<b>3,768.6</b>	<b>46.2</b>	<b>17.4</b>	<b>92.0</b>	<b>80.8</b>	<b>890.4</b>	<b>1,510.6</b>	<b>142.9</b>	<b>144.2</b>	<b>414.3</b>	<b>429.9</b>
Primary	714.6	17.5	7.7	22.6	20.3	108.4	150.0	48.1	83.6	168.9	87.5
Agriculture	422.7	0.8	4.6	7.7	6.0	68.3	110.6	38.2	67.3	85.9	33.3
Other primary industries	291.9	16.7	3.0	15.0	14.2	40.1	39.4	9.9	16.3	83.0	54.2
Manufacturing	2,166.8	17.4	5.7	44.9	38.7	617.0	1,010.0	64.2	33.5	134.8	200.6
Construction	747.3	8.8	3.8	21.7	17.5	128.4	293.7	25.1	22.5	96.8	128.9
Utilities	139.9	2.5	0.2	2.7	4.3	36.6	56.8	5.6	4.6	13.7	12.8
<b>Service-producing industries</b>	<b>10,171.9</b>	<b>145.7</b>	<b>43.1</b>	<b>299.9</b>	<b>235.2</b>	<b>2,369.9</b>	<b>3,902.3</b>	<b>395.3</b>	<b>330.0</b>	<b>1,042.7</b>	<b>1,407.8</b>
Transportation, storage and communications	897.1	12.6	2.6	24.3	24.5	201.9	327.2	42.3	32.4	95.6	133.6
Trade	2,385.9	35.8	11.0	72.5	59.4	540.3	927.0	89.9	77.5	249.2	323.3
Finance, insurance and real estate	795.3	6.9	2.1	18.8	14.0	180.1	348.6	27.9	25.7	65.0	106.1
Community, business and personal services	5,302.7	73.4	21.7	153.8	113.6	1,243.6	2,012.8	200.9	166.3	562.5	754.1
Community services	2,386.8	44.8	10.8	78.7	60.1	597.3	851.6	101.9	86.9	232.9	321.8
Business and personal services	2,915.9	28.6	11.0	75.1	53.6	646.3	1,161.3	99.0	79.4	329.5	432.3
Public administration	790.9	17.0	5.7	30.5	23.6	204.	286.6	34.2	28.1	70.5	90.7

Source: Statistics Canada, CANSIM, matrices 3472 to 3482.

## 7.8 Employment by Detailed Industry and Sex, 1997

	Number employed			% of total employed		
	Both sexes	Men	Women	Both sexes	Men	Women
		thousands			%	
<b>All industries</b>	<b>13,940.6</b>	<b>7,648.8</b>	<b>6,291.7</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Goods-producing industries	3,768.6	2,862.7	905.9	27.0	37.4	14.4
Agriculture	422.7	284.5	138.3	3.0	3.7	2.2
Other primary industries	291.9	251.3	40.6	2.1	3.3	0.6
Fishing and trapping	35.8	31.5	4.4	0.3	0.4	0.1
Logging and forestry	78.8	68.5	10.3	0.6	0.9	0.2
Mining, quarrying and oil wells	177.2	151.3	25.9	1.3	2.0	0.4
Utilities	139.9	106.0	33.9	1.0	1.4	0.5
Manufacturing	2,166.8	1,556.1	610.7	15.5	20.3	9.7
Construction	747.3	664.9	82.4	5.4	8.7	1.3
Service-producing industries	10,171.9	4,786.2	5,385.8	73.0	62.6	85.6
Transportation, storage and communications	897.1	662.3	234.8	6.4	8.7	3.7
Transportation and storage	582.0	473.3	108.7	4.2	6.2	1.7
Communications	315.1	189.0	126.1	2.3	2.5	2.0
Trade	2,385.9	1,339.2	1,046.7	17.1	17.5	16.6
Wholesale trade	654.6	467.6	187.1	4.7	6.1	3.0
Retail trade	1,731.3	871.6	859.6	12.4	11.4	13.7
Finance, insurance and real estate	795.3	311.0	484.2	5.7	4.1	7.7
Finance and insurance	543.8	172.8	371.0	3.9	2.3	5.9
Real estate and insurance agencies	251.5	138.2	113.2	1.8	1.8	1.8
Community, business and personal services	5,302.7	2,027.4	3,275.3	38.0	26.5	52.1
Business services	1,004.6	569.4	435.2	7.2	7.4	6.9
Educational services	961.6	361.5	600.1	6.9	4.7	9.5
Health and social services	1,425.2	305.7	1,119.5	10.2	4.0	17.8
Accommodation, food and beverage services	898.0	368.1	529.9	6.4	4.8	8.4
Other services	1,013.4	422.7	590.7	7.3	5.5	9.4
Public administration	790.9	446.3	344.7	5.7	5.8	5.5

Source: Statistics Canada, Catalogue no. 71F0004-XCB.



## 7.9 Full-time and Part-time Employment

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	thousands									
<b>Both sexes, total</b>	<b>12,819</b>	<b>13,086</b>	<b>13,165</b>	<b>12,916</b>	<b>12,842</b>	<b>13,015</b>	<b>13,292</b>	<b>13,506</b>	<b>13,676</b>	<b>13,941</b>
15-24 years	2,545	2,517	2,384	2,214	2,107	2,061	2,074	2,072	2,040	2,025
25-44 years	6,974	7,185	7,322	7,226	7,147	7,247	7,342	7,438	7,496	7,600
45 years and over	3,300	3,385	3,459	3,476	3,588	3,707	3,876	3,996	4,141	4,315
<b>Full-time</b>	<b>10,667</b>	<b>10,917</b>	<b>10,929</b>	<b>10,574</b>	<b>10,467</b>	<b>10,534</b>	<b>10,798</b>	<b>10,997</b>	<b>11,087</b>	<b>11,291</b>
15-24 years	1,688	1,653	1,518	1,312	1,205	1,128	1,143	1,140	1,111	1,106
25-44 years	6,178	6,387	6,479	6,331	6,237	6,285	6,391	6,479	6,495	6,567
45 years and over	2,801	2,878	2,933	2,931	3,025	3,121	3,265	3,379	3,481	3,618
<b>Part-time</b>	<b>2,152</b>	<b>2,169</b>	<b>2,236</b>	<b>2,343</b>	<b>2,375</b>	<b>2,480</b>	<b>2,493</b>	<b>2,509</b>	<b>2,589</b>	<b>2,649</b>
15-24 years	857	864	867	903	902	933	930	932	929	919
25-44 years	796	798	843	896	910	962	952	959	1,001	1,033
45 years and over	499	507	526	545	563	586	611	617	659	697
<b>Men</b>										
Full-time	6,620	6,718	6,652	6,389	6,294	6,341	6,511	6,613	6,678	6,847
15-24 years	939	919	833	709	652	620	648	646	646	658
25-44 years	3,789	3,877	3,880	3,766	3,696	3,725	3,788	3,836	3,833	3,900
45 years and over	1,892	1,922	1,939	1,914	1,947	1,995	2,076	2,131	2,199	2,288
Part-time	627	638	668	715	737	786	779	783	801	802
15-24 years	391	390	396	406	412	425	418	419	406	397
25-44 years	114	116	134	156	169	202	191	189	206	206
45 years and over	123	132	138	153	156	159	169	176	188	199
<b>Women</b>										
Full-time	4,047	4,199	4,277	4,185	4,173	4,194	4,287	4,384	4,409	4,445
15-24 years	749	733	685	603	554	508	496	494	464	448
25-44 years	2,389	2,510	2,599	2,565	2,541	2,560	2,603	2,642	2,662	2,667
45 years and over	909	956	993	1,017	1,079	1,126	1,189	1,247	1,282	1,330
Part-time	1,525	1,530	1,568	1,627	1,638	1,695	1,715	1,725	1,788	1,847
15-24 years	466	474	471	496	490	508	512	514	523	523
25-44 years	682	682	709	740	741	760	760	770	794	827
45 years and over	376	375	388	391	407	427	442	441	471	498

Source: Statistics Canada, CANSIM, matrix 3472.

## 7.10 Employment by Occupation and Sex, 1997

	Number employed			% of total employed		
	Both sexes	Men	Women	Both sexes	Men	Women
	thousands			%		
<b>All occupations</b>	<b>13,940.6</b>	<b>7,648.8</b>	<b>6,291.7</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Managerial and other professional occupations	4,641.1	2,269.2	2,371.9	33.29	29.67	37.70
Managerial and administrative	1,929.7	1,066.1	863.6	13.84	13.94	13.73
Other professional	2,711.4	1,203.1	1,508.3	19.45	15.73	23.97
Natural sciences, engineering and mathematics	619.0	489.2	129.8	4.44	6.40	2.06
Social sciences	309.3	110.6	198.6	2.22	1.45	3.16
Religion	39.9	30.4	9.5	0.29	0.40	0.15
Teaching	660.4	236.5	423.9	4.74	3.09	6.74
Medicine and health	752.4	156.7	595.7	5.40	2.05	9.47
Artistic, literary and recreational	330.4	179.7	150.8	2.37	2.35	2.40
Clerical occupations	1,926.9	398.6	1,528.3	13.82	5.21	24.29
Sales occupations	1,417.0	756.2	660.8	10.16	9.89	10.50
Service occupations	1,879.0	797.0	1,082.0	13.48	10.42	17.20
Primary occupations	608.1	475.3	132.7	4.36	6.21	2.11
Farming, horticultural and animal husbandry	454.3	329.4	124.8	3.26	4.31	1.98
Fishing and trapping	32.2	29.5	2.6	0.23	0.39	0.04
Forestry and logging	54.4	51.4	3.1	0.39	0.67	0.05
Mining and quarrying	67.2	65.0	2.2	0.48	0.85	0.03
Processing, machining and fabricating, etc.	1,747.6	1,407.1	340.5	12.54	18.40	5.41
Processing	357.1	271.8	85.3	2.56	3.55	1.36
Machining	245.1	230.3	14.8	1.76	3.01	0.24
Fabricating, assembling and repairing	1,145.4	905.1	240.3	8.22	11.83	3.82
Construction trades	705.0	683.4	21.6	5.06	8.93	0.34
Transport equipment operating	535.4	484.0	51.4	3.84	6.33	0.82
Material handling and other crafts	480.6	378.0	102.6	3.45	4.94	1.63
Material handling	323.4	253.6	69.8	2.32	3.32	1.11
Other crafts	157.1	124.3	32.8	1.13	1.63	0.52

Source: Statistics Canada, Catalogue no. 71F0004-XCB.

## 7.11 Employment by Class of Worker and Industry, 1997

	All workers	Paid workers	Private sector			Government	Self-employed unincorporated	Unpaid family workers
			Total	Employees	Self-employed			
			thousands					
<b>All industries</b>	<b>13,940.6</b>	<b>12,287.8</b>	<b>10,221.7</b>	<b>9,386.6</b>	<b>835.1</b>	<b>2,066.1</b>	<b>1,586.3</b>	<b>66.5</b>
Agriculture	422.7	178.3	178.3	122.2	56.1	—	215.7	28.8
Non-agriculture	13,517.9	12,109.5	10,043.4	9,264.4	779.0	2,066.1	1,370.6	37.7
Other primary industries	291.9	256.8	245.7	226.5	19.2	11.1	34.2	—
Manufacturing	2,166.8	2,118.7	2,111.1	2,047.5	63.6	7.6	46.0	2.2
Construction	747.3	577.6	577.6	469.2	108.4	—	164.3	5.2
Transportation, communications and other utilities	897.1	812.4	651.4	609.5	41.9	161.0	82.5	2.3
Trade	2,385.9	2,145.2	2,127.2	1,919.9	207.3	18.0	228.4	12.3
Finance, insurance and real estate	795.3	713.5	663.0	619.2	43.8	50.5	80.6	—
Service	5,302.7	4,555.3	3,616.2	3,322.5	293.7	939.1	733.9	13.6
Public administration	790.9	790.9	1.7	1.7	—	789.2	—	—

Source: Statistics Canada, Catalogue no. 71F0004-XCB.



7.12 Weekly Earnings<sup>1</sup> for All Employees,<sup>2</sup> by Industry

	1994	1995	1996	1997
	Average weekly earnings \$			
<b>All industries<sup>3</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>
<b>Goods-producing industries</b>	<b>711.49</b>	<b>721.80</b>	<b>742.16</b>	<b>762.23</b>
Logging and forestry	733.88	735.30	768.63	793.12
Mining	972.67	1,013.75	1,051.24	1,036.86
Crude petroleum and natural gas	1,165.58	1,202.52	1,243.35	1,252.89
Quarries and sand pits	669.64	724.13	746.72	781.99
Manufacturing	685.84	694.58	716.62	736.69
Non-durable goods	641.61	650.98	666.23	680.89
Durable goods	723.55	730.44	757.17	780.94
Food	568.74	575.58	592.94	598.89
Beverages	769.65	755.81	769.81	775.20
Tobacco products	1,141.55	1,153.45	1,180.23	1,199.55
Rubber products	714.85	705.57	678.99	746.09
Plastic products	573.53	574.28	605.68	603.05
Leather and allied products	420.15	435.75	473.28	468.55
Primary textiles	655.56	681.59	669.62	667.05
Textile products	462.14	495.66	533.60	556.49
Clothing	382.74	397.82	423.21	434.37
Wood	619.01	633.74	680.42	685.69
Furniture and fixtures	536.45	534.91	562.42	574.06
Paper and allied products	869.86	898.87	914.15	930.15
Printing	612.45	624.85	641.38	667.40
Primary metals	876.10	896.15	926.25	954.76
Fabricated metal products	649.99	667.52	701.50	728.75
Machinery	721.22	737.18	776.53	807.97
Transportation equipment	843.34	847.98	860.27	897.62
Electrical and electronic products	756.13	741.44	754.38	798.28
Non-metallic mineral products	702.77	719.06	748.55	758.24
Refined petroleum and coal products	1,090.97	1,108.76	1,094.59	1,100.97
Chemical and chemical products	812.92	805.52	819.71	857.89
Construction	664.00	680.59	695.67	711.35

**7.12 Weekly Earnings<sup>1</sup> for All Employees,<sup>2</sup> by Industry (concluded)**

	1994	1995	1996	1997
	Average weekly earnings \$			
<b>Service-producing industries</b>	<b>525.37</b>	<b>529.62</b>	<b>539.29</b>	<b>548.56</b>
Transportation and storage	674.84	689.37	701.22	723.06
Communication	683.54	697.42	696.05	708.80
Utilities	923.54	937.95	941.87	970.39
Trade	421.82	431.35	439.72	451.89
Wholesale trade	605.56	621.96	628.45	643.96
Retail trade	339.22	342.31	348.06	355.22
Finance and insurance	676.38	695.38	749.68	784.89
Real estate operators and insurance agencies	557.70	559.88	587.18	631.67
Business services	604.66	621.54	651.93	680.50
Public administration	752.06	750.65	740.05	739.57
Educational services	682.33	680.90	683.29	679.68
Libraries	450.63	448.97	438.86	435.84
Health and social services	504.28	502.98	509.81	517.52
Accommodation, food and beverage	227.57	232.20	236.83	235.36
Amusement and recreation	317.65	321.56	332.32	336.37
Personal services (excluding private households)	312.81	320.60	334.29	336.37

1. Includes overtime.

2. Excludes owners or partners of unincorporated business, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T-4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72Fo002-XDE.

**7.13 Full-time, Full-year Workers, by Earnings Class, 1996**

	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.
	%										
<b>Earnings class</b>											
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under \$5,000	2.0	1.3	3.7	2.6	2.2	1.4	2.2	2.8	4.7	2.3	1.4
\$5,000-\$9,999	3.2	7.1	4.8	3.9	3.9	2.7	2.9	5.6	5.3	3.8	2.8
\$10,000-\$14,999	6.6	9.5	9.0	7.6	9.3	7.2	5.6	8.1	8.4	7.4	5.8
\$15,000-\$19,999	8.7	9.7	9.4	11.1	10.4	11.1	7.3	10.9	9.6	7.2	8.0
\$20,000-\$24,999	10.2	13.0	14.9	12.5	14.2	10.7	8.9	13.2	11.4	12.2	8.9
\$25,000-\$29,999	11.5	8.1	18.2	14.1	10.7	13.4	10.6	12.7	13.2	11.0	10.2
\$30,000-\$34,999	11.8	11.4	9.4	12.4	9.9	12.1	11.7	12.1	10.9	11.6	12.3
\$35,000-\$39,999	9.5	12.4	9.3	7.8	10.0	8.6	9.9	8.3	8.7	9.4	10.6
\$40,000-\$44,999	8.4	5.7	5.5	8.9	8.6	8.6	8.8	7.5	7.2	8.0	8.1
\$45,000-\$49,999	5.9	4.3	5.9	5.1	6.3	4.6	6.5	4.0	6.0	5.4	7.8
\$50,000-\$59,999	9.9	8.8	4.9	7.5	7.4	9.8	11.0	7.5	6.2	9.6	9.9
\$60,000 and over	12.3	8.7	5.1	6.5	7.1	9.7	14.9	7.5	8.3	12.2	14.1
Average earnings (\$)	37,465	32,800	29,635	31,974	32,705	35,606	39,856	31,992	32,380	36,026	40,262
Median earnings (\$)	33,326	30,591	27,275	29,342	29,643	31,422	35,553	28,745	29,044	32,623	35,245
Estimated numbers (thousands)	9,522	116	36	241	201	2,264	3,792	377	320	978	1,197

Source: Statistics Canada, Catalogue no. 13-217-XPB.

**7.14 Part-time and Part-year Workers, by Earnings Class, 1996**

	Canada	Nfld.	P. E. I.	N.S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.
	%										
<b>Earnings class</b>											
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Under \$2,000	16.9	17.6	15.5	20.5	17.5	15.0	17.4	16.6	20.0	17.8	16.2
\$2,000-\$2,999	6.8	7.0	6.5	8.2	7.2	5.9	6.8	7.9	9.0	7.5	6.7
\$3,000-\$3,999	5.8	5.8	6.8	6.1	7.3	5.2	6.1	5.3	5.0	6.8	5.6
\$4,000-\$4,999	5.6	5.0	6.1	7.7	5.0	5.5	5.8	6.0	4.3	6.2	4.4
\$5,000-\$6,999	10.7	12.7	14.0	11.0	13.0	10.3	11.0	12.6	11.8	10.2	9.0
\$7,000-\$9,999	12.6	13.1	13.8	12.4	13.3	13.8	12.1	12.3	11.4	12.2	11.9
\$10,000-\$11,999	6.7	7.7	7.8	5.6	8.3	7.2	6.1	6.4	7.2	6.1	7.4
\$12,000-\$14,999	7.8	8.4	7.3	8.5	8.3	7.6	7.9	8.3	8.1	6.7	8.1
\$15,000-\$19,999	8.7	7.1	7.5	8.2	7.1	9.1	8.3	9.6	8.5	9.0	9.3
\$20,000-\$24,999	6.4	4.4	6.7	4.5	5.4	7.4	6.1	5.7	5.2	6.7	7.0
\$25,000-\$29,999	3.9	4.1	3.3	2.4	3.1	4.5	3.6	3.9	3.6	3.2	4.6
\$30,000 and over	8.1	7.3	4.7	5.0	4.3	8.5	8.7	5.4	6.0	7.5	9.7
Average earnings (\$)	11,704	10,973	10,378	9,546	9,693	12,094	11,845	10,883	10,028	11,435	12,689
Median earnings (\$)	7,999	7,458	7,238	6,371	6,982	8,754	7,714	7,382	6,999	7,340	9,037
Estimated numbers (thousands)	6,422	147	42	234	202	1,527	2,295	223	219	645	889

Source: Statistics Canada, Catalogue no. 13-217-XPB.



## 7.15 Earnings by Sex

Year	All workers			Full-year <sup>1</sup> full-time workers			Other workers		
	Men	Women	Earnings ratio	Men	Women	Earnings ratio	Men	Women	Earnings ratio
	\$ constant 1996		%	\$ constant 1996		%	\$ constant 1996		%
1967	26,177	12,068	46.1	31,548	18,427	58.4	13,091	6,619	50.6
1969	27,960	12,778	45.7	34,412	20,188	58.7	17,104	7,863	46.0
1971	30,013	14,067	46.9	37,304	22,255	59.7	14,730	7,427	50.4
1972	31,116	14,348	46.1	38,621	23,104	59.8	14,758	7,627	51.7
1973	31,684	14,658	46.3	39,347	23,320	59.3	14,929	7,795	52.2
1974	32,415	15,370	47.4	40,911	24,368	59.6	15,965	8,519	53.4
1975	33,184	15,956	48.1	41,957	25,256	60.2	16,664	8,435	50.6
1976	35,358	16,509	46.7	44,921	26,565	59.1	17,679	9,272	52.4
1977	33,547	17,030	50.8	41,708	25,881	62.1	15,513	9,427	60.9
1978	33,405	16,971	50.8	42,436	26,733	63.0	15,327	8,992	58.7
1979	33,258	17,149	51.6	41,174	26,133	63.5	16,133	9,349	57.9
1980	33,299	17,207	51.7	41,909	26,969	64.4	14,998	9,209	61.4
1981	32,500	17,431	53.6	41,129	26,214	63.7	15,399	9,592	62.3
1982	30,969	17,051	55.1	40,671	26,029	64.0	14,196	8,947	63.0
1983	31,160	17,207	55.2	41,555	26,931	64.8	13,521	8,422	62.3
1984	30,581	17,596	57.5	40,498	26,562	65.6	13,432	9,411	70.1
1985	31,311	17,637	56.3	40,602	26,421	65.1	12,980	9,094	70.1
1986	31,746	18,248	57.5	40,807	26,852	65.8	13,408	9,927	74.0
1987	32,037	18,523	57.8	41,303	27,320	66.1	13,298	10,139	76.2
1988	32,842	18,884	57.5	41,912	27,426	65.4	13,497	10,009	74.2
1989	32,913	19,445	59.1	41,655	27,484	66.0	14,211	10,474	73.7
1990	32,517	19,459	59.8	41,811	28,310	67.7	14,313	10,123	71.7
1991	31,619	19,458	61.5	41,494	28,893	69.6	13,622	9,567	70.2
1992	31,516	20,133	63.9	41,900	30,122	71.9	12,976	9,849	75.9
1993	30,872	19,865	64.3	41,058	29,653	72.2	12,890	9,614	74.6
1994	32,255	20,086	62.3	42,247	29,491	69.8	12,917	10,090	78.1
1995	31,527	20,528	65.1	41,230	30,154	73.1	13,178	10,143	77.0
1996	32,248	20,902	64.8	41,848	30,717	73.4	13,280	10,386	78.2

1. "Full-year" is defined as 50 to 52 weeks for data prior to 1981 and 49 to 52 weeks for more recent data.

Source: Statistics Canada, Catalogue no. 13-217-XPB.

**7.16 Weekly Hours for Employees Paid by the Hour, 1997**

	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Y. T.	N. W. T.
	hours												
<b>All industries<sup>1</sup></b>	<b>31.3</b>	<b>32.7</b>	<b>31.4</b>	<b>32.1</b>	<b>33.3</b>	<b>31.7</b>	<b>31.8</b>	<b>30.3</b>	<b>28.9</b>	<b>31.2</b>	<b>29.2</b>	<b>31.2</b>	<b>31.5</b>
<b>Goods-producing industries</b>	<b>39.3</b>	<b>39.4</b>	<b>38.2</b>	<b>39.4</b>	<b>39.9</b>	<b>38.2</b>	<b>40.6</b>	<b>38.4</b>	<b>38.9</b>	<b>40.6</b>	<b>35.6</b>	<b>35.9</b>	<b>37.0</b>
Logging and forestry	40.4	44.2	...	43.0	43.4	39.2	43.8	38.4	40.4	40.9	39.3	...	...
Mining, quarrying and oil wells	42.5	42.6	...	40.6	38.0	40.9	41.1	39.1	41.9	45.1	41.9	...	41.0
Manufacturing	39.3	38.2	37.5	39.1	39.8	38.4	40.8	37.8	37.5	39.1	35.6	...	...
Non-durable goods	37.3	37.5	36.0	38.0	38.8	37.6	37.8	36.4	37.4	37.5	33.6	31.1	29.9
Durable goods	40.7	41.2	40.8	41.1	41.5	39.2	42.3	38.8	37.5	40.0	36.7	...	...
Construction	38.2	40.1	39.5	40.0	39.9	36.6	39.6	39.3	39.4	40.5	33.2	33.3	33.6
<b>Service-producing industries</b>	<b>28.0</b>	<b>30.4</b>	<b>28.8</b>	<b>29.5</b>	<b>30.6</b>	<b>29.0</b>	<b>27.5</b>	<b>27.5</b>	<b>26.6</b>	<b>28.0</b>	<b>27.1</b>	<b>30.0</b>	<b>29.8</b>
Transportation, communications and other utilities	36.6	37.1	36.6	37.1	38.9	37.4	36.6	38.4	37.0	35.7	35.2	30.8	33.6
Trade	28.1	29.6	29.5	29.2	30.4	29.6	26.9	27.5	27.7	28.8	28.0	29.2	26.6
Wholesale trade	35.5	36.6	39.6	38.1	38.9	34.8	35.9	34.5	34.5	35.7	34.4	32.7	31.6
Retail trade	26.1	27.8	27.0	27.0	27.8	28.1	24.4	25.5	25.9	26.5	26.3	28.2	25.4
Finance, insurance and real estate	28.5	29.5	30.0	29.2	29.6	31.5	26.4	25.1	25.9	26.8	27.3	31.0	33.1
Community, business and personal services	26.7	29.6	26.8	28.6	29.9	27.4	26.7	26.1	24.9	26.4	25.3	29.0	29.6
Business services	31.0	31.2	30.2	30.6	30.1	31.3	30.8	27.7	29.1	30.9	32.2	32.8	32.9
Educational services	34.0	34.2	35.0	33.4	33.8	34.1	34.1	33.8	33.6	33.7	34.1	21.1	32.0
Health and social services	28.3	31.3	28.7	30.0	31.6	28.2	28.8	29.1	26.2	29.1	25.7	30.1	30.8
Accommodation, food and beverage services	23.6	27.5	25.0	26.7	27.3	24.4	23.3	21.5	22.4	23.3	22.9	27.9	26.8
Miscellaneous services	26.0	28.7	27.3	28.4	28.9	27.8	24.2	25.8	25.3	26.5	25.6	28.6	28.5

1. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72F0002-XDE.

**7.17 Effective Wage Increases in New Collective Agreements**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	%									
<b>All industries</b>	<b>4.4</b>	<b>5.2</b>	<b>5.8</b>	<b>3.7</b>	<b>2.4</b>	<b>0.7</b>	<b>0.4</b>	<b>0.9</b>	<b>1.0</b>	<b>1.6</b>
Primary industries	5.8	5.1	5.5	4.6	2.8	1.0	1.0	2.5	1.8	2.0
Manufacturing	4.9	5.5	5.1	3.7	2.2	1.9	1.9	2.3	2.8	2.1
Construction	5.5	7.8	5.7	5.1	3.4	1.5	1.4	1.1	0.5	2.3
Transportation, communications and utilities	4.0	4.5	5.5	3.4	2.4	0.8	1.0	1.1	0.8	1.6
Trade, finance, insurance and real estate	3.5	4.6	6.4	3.5	2.8	0.6	0.1	0.7	0.8	1.7
Service	3.8	5.4	5.8	4.4	2.5	0.8	-0.0	0.5	0.6	1.1
Public administration	4.3	5.0	5.8	3.5	2.3	0.7	0.1	0.7	0.5	1.2
Commercial sector	4.7	4.9	5.7	3.8	2.5	0.8	1.1	1.3	1.5	1.9
Non-commercial sector	4.0	5.3	5.9	3.7	2.4	0.7	-0.2	0.4	0.4	1.1
Private sector	5.0	5.0	5.6	4.2	2.6	0.8	1.2	1.5	1.7	2.0
Public sector	3.9	5.2	5.8	3.6	2.4	0.7	0.1	0.6	0.5	1.1
Federal Public Service Staff Relations Act	3.5	4.2	5.2	3.4	..	..	..	..	..	3.2
Federal Crown corporations	3.8	3.9	4.6	3.6	3.0	2.3	1.8	0.9	0.6	0.8
Provincial administration	4.2	5.6	6.4	3.1	2.3	0.7	0.1	1.0	0.4	1.0
Local administration	4.7	5.3	4.9	4.9	3.1	0.9	0.7	0.6	0.8	1.2
Education, health and welfare	3.8	5.6	5.8	4.5	2.4	0.8	-0.3	0.4	0.4	1.1
Telephone, electricity and water	3.1	4.5	5.2	2.4	2.7	1.6	0.6	..	0.9	1.3

Source: Statistics Canada, CANSIM, matrix 4049.

**7.18 Days of Work Lost per Worker**

	1980	1984	1988	1990	1991	1992	1993	1994	1995	1996	1997
	days										
<b>Both sexes</b>	<b>8.2</b>	<b>8.7</b>	<b>9.0</b>	<b>9.3</b>	<b>9.3</b>	<b>9.1</b>	<b>9.2</b>	<b>9.1</b>	<b>9.1</b>	<b>8.8</b>	<b>9.3</b>
15-24 years	7.0	6.9	6.9	7.5	7.5	7.3	7.1	6.7	6.9	6.8	6.7
25-44 years	8.0	8.6	9.1	9.4	9.4	9.5	9.9	9.5	9.7	9.2	9.8
45 years and over	9.8	10.6	10.4	10.2	10.0	9.2	8.6	9.3	8.9	8.6	9.3
Men	7.3	7.3	7.2	7.3	7.0	6.7	6.5	6.3	6.3	5.9	6.3
Women	9.8	11.2	11.9	12.4	12.7	12.7	13.1	13.2	13.3	13.0	13.8
<b>All industries</b>	<b>8.2</b>	<b>8.7</b>	<b>9.0</b>	<b>9.3</b>	<b>9.3</b>	<b>9.1</b>	<b>9.2</b>	<b>9.1</b>	<b>9.1</b>	<b>8.8</b>	<b>9.3</b>
Agriculture	4.3	4.1	5.9	5.7	5.3	5.7	5.1	5.3	6.3	4.9	7.5
Other primary industries	8.7	9.1	7.9	9.1	9.1	8.7	7.4	6.6	7.5	6.9	7.3
Manufacturing	9.5	9.9	10.2	10.5	10.4	9.7	9.5	9.6	9.1	8.6	9.1
Construction	7.4	6.8	8.5	8.4	7.8	6.8	6.6	7.0	7.5	8.3	6.5
Transportation, communications and other utilities	9.1	9.0	10.5	8.9	9.6	9.1	9.7	9.1	9.4	8.7	9.7
Trade	6.7	6.4	6.8	7.3	7.4	7.9	7.3	6.8	8.4	7.1	7.6
Finance, insurance and real estate	7.3	8.0	8.3	9.2	8.4	8.1	8.9	9.7	9.2	9.1	8.9
Service	7.8	9.2	9.3	9.6	9.8	9.9	10.3	10.2	9.7	9.6	10.7
Public administration	9.0	10.3	9.5	10.7	10.4	9.9	10.2	10.0	9.9	10.4	10.7



**7.18 Days of Work Lost per Worker (concluded)**

	1980	1984	1988	1990	1991	1992	1993	1994	1995	1996	1997
						days					
<b>All occupations</b>	<b>8.2</b>	<b>8.7</b>	<b>9.0</b>	<b>9.3</b>	<b>9.3</b>	<b>9.1</b>	<b>9.2</b>	<b>9.1</b>	<b>9.1</b>	<b>8.8</b>	<b>9.3</b>
Managerial and administrative	6.3	7.5	7.6	7.9	8.0	7.7	8.4	8.1	8.3	8.1	9.1
Clerical	8.5	9.6	9.6	10.4	10.7	11.4	11.5	11.4	11.2	10.8	11.1
Sales	5.6	5.9	6.4	6.8	6.8	7.1	6.2	7.4	7.2	6.9	7.0
Service	8.5	9.4	9.3	9.9	9.3	9.8	10.2	10.5	9.8	9.9	10.3
Primary occupations	7.4	7.6	8.0	7.7	7.5	8.3	6.5	6.5	7.6	7.0	6.7
Processing, machining and fabrication	10.7	10.7	10.9	11.6	11.5	10.6	10.4	10.2	9.8	8.8	9.2
Construction	8.2	8.8	9.5	9.3	9.1	7.7	7.5	7.9	7.3	8.0	7.5
Transport equipment operating	10.1	9.5	11.8	9.7	10.4	10.5	10.4	9.1	10.2	8.8	10.4
Material handling and other crafts	9.6	9.2	11.8	11.0	11.5	9.8	9.3	9.0	10.7	9.7	9.1

Source: Statistics Canada, Catalogue no. 71F0004-XCB.

**7.19 Time Lost in Work Stoppages**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
						thousand person-days				
<b>All industry sectors</b>	<b>5,045.7</b>	<b>3,723.6</b>	<b>5,153.7</b>	<b>2,582.0</b>	<b>2,201.5</b>	<b>1,602.5</b>	<b>1,618.0</b>	<b>1,607.4</b>	<b>3,343.4</b>	<b>3,573.3</b>
Logging and forestry	19.5	53.2	0.8	44.4	4.1	1.4	2.3	3.8	4.3	1.9
Fishing and trapping	—	35.6	—	2.0	1.0	—	—	—	0.2	—
Mining, quarrying and oil wells	161.6	186.8	411.2	153.0	275.7	114.5	71.7	24.4	137.2	164.3
Manufacturing	1,394.9	1,211.3	2,474.2	788.0	910.4	501.2	657.3	722.1	897.7	1,272.0
Construction	632.5	133.9	1,149.9	35.2	151.4	156.7	21.2	202.2	92.5	—
Transportation, communications and other utilities	2,012.2	472.9	399.5	109.6	120.9	65.4	233.8	277.3	111.7	84.7
Wholesale trade	42.6	43.4	36.0	54.3	10.2	31.6	14.7	11.8	19.3	5.7
Retail trade	147.1	159.8	134.0	89.8	104.0	208.3	204.5	61.5	404.2	457.3
Public administration and service	636.1	1,427.1	549.0	1,305.9	624.5	524.0	412.9	281.4	1,546.2	1,562.7

Source: Statistics Canada, CANSIM, matrix 28.

7.20 Unionization Rate,<sup>1</sup> 1992

	Membership			Paid workers			Unionization rate		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
	thousands						%		
<b>All industries</b>	<b>3,802.8</b>	<b>2,216.3</b>	<b>1,586.5</b>	<b>10,889.1</b>	<b>5,803.1</b>	<b>5,085.9</b>	<b>34.9</b>	<b>38.2</b>	<b>31.2</b>
Agriculture	2.4	1.4	1.0	143.1	90.9	52.2	1.6	1.5	1.9
Forestry	28.5	26.8	1.7	53.6	48.7	4.9	53.1	54.9	34.4
Fishing and trapping	7.0	6.1	1.0	13.1	11.2	2.0	53.5	54.4	48.4
Mining, quarrying and oil wells	40.9	39.0	1.9	139.3	119.9	19.4	29.4	32.5	9.9
Metal mines	21.5	20.6	0.9	41.4	39.6	1.8	52.0	52.1	49.8
Mineral fuels	8.2	7.6	0.7	72.9	62.6	10.3	11.3	12.1	6.3
Other mines	11.1	10.8	0.4	25.0	17.7	7.3	44.4	60.7	5.1
Manufacturing	608.1	491.1	117.0	1,727.8	1,235.6	492.2	35.2	39.7	23.8
Food and beverage	101.4	75.4	26.0	230.0	152.8	77.2	44.1	49.3	33.6
Tobacco	2.6	1.6	1.0	7.7	4.8	2.9	34.5	34.1	35.1
Rubber	18.3	14.2	4.1	76.3	52.6	23.7	24.0	27.0	17.2
Leather	3.4	1.4	1.9	14.5	7.2	7.2	23.2	19.9	26.5
Textiles, knitting and clothing	38.8	13.2	25.7	140.4	48.5	91.9	27.7	27.1	27.9
Wood	34.5	31.6	2.9	106.2	92.6	13.6	32.5	34.2	21.2
Furniture	7.4	5.6	1.8	45.8	36.7	9.2	16.2	15.4	19.4
Paper	73.9	66.8	7.0	107.6	93.4	14.2	68.7	71.5	49.6
Printing	29.3	22.0	7.4	151.8	88.3	63.5	19.3	24.9	11.6
Primary metal	54.2	51.8	2.5	89.7	81.5	8.3	60.4	63.5	29.7
Metal fabrication	44.3	41.0	3.3	113.0	99.1	13.9	39.2	41.4	23.6
Machinery	16.8	15.0	1.8	58.2	44.5	13.7	28.9	33.6	13.5
Transportation equipment	97.2	83.9	13.3	240.1	196.7	43.4	40.5	42.7	30.7
Electrical products	32.7	22.2	10.5	135.3	92.3	43.0	24.2	24.0	24.5
Non-metallic mineral products	19.9	17.9	2.0	37.9	31.7	6.2	52.6	56.5	32.8
Petroleum and coal products	5.9	5.6	0.3	14.2	11.8	2.4	41.5	47.4	13.3
Chemicals	16.5	13.7	2.8	92.9	63.9	29.0	17.8	21.5	9.6
Miscellaneous	10.9	8.2	2.7	66.2	37.3	28.9	16.5	21.9	9.5
Construction industry	336.5	328.1	8.4	516.1	445.5	70.6	65.2	73.6	11.9
Transportation, communications and other utilities	462.2	344.4	117.9	865.1	638.8	226.3	53.4	53.9	52.1
Transportation	222.3	188.7	33.7	444.6	364.3	80.3	50.0	51.8	41.9
Communications	168.9	98.3	70.6	279.0	164.9	114.1	60.5	59.6	61.9
Other utilities	71.0	57.4	13.6	141.4	109.5	31.9	50.2	52.4	42.7
Trade	231.5	141.1	90.4	1,941.6	1,054.2	887.4	11.9	13.4	10.2
Wholesale trade	55.0	45.5	9.5	515.7	365.1	150.5	10.7	12.5	6.3
Retail trade	176.6	95.6	81.0	1,425.9	689.1	736.9	12.4	13.9	11.0
Finance	22.8	5.8	17.1	484.7	154.0	330.7	4.7	3.8	5.2
Real estate operators and insurance agencies	5.6	3.6	1.9	236.3	129.9	106.4	2.4	2.8	1.8
Service industries	1,413.5	465.0	948.5	3,954.9	1,411.1	2,543.8	35.7	33.0	37.3
Business services	24.4	18.9	5.5	581.1	314.4	266.7	4.2	6.0	2.1
Educational services	662.4	262.5	400.0	904.6	345.1	559.5	73.2	76.0	71.5
Health and social services	585.8	108.5	477.3	1,149.8	200.6	949.2	50.9	54.1	50.3
Accommodation, food and beverage	60.8	28.7	32.1	700.1	282.9	417.1	8.7	10.2	7.7
Other services	80.1	46.4	33.7	619.3	268.1	351.2	12.9	17.3	9.6
Public administration	643.8	364.0	279.8	813.2	463.3	349.9	79.2	78.6	80.0

1. Excludes pensioners, unemployed and members in the Territories.

Source: Statistics Canada, Catalogue no. 71-202.

## 7.21 Employment Insurance Beneficiaries

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Average monthly number										
<b>All benefits</b>	<b>1,014,653</b>	<b>1,029,687</b>	<b>1,120,812</b>	<b>1,365,328</b>	<b>1,388,278</b>	<b>1,291,914</b>	<b>1,114,807</b>	<b>956,960</b>	<b>911,469</b>	<b>782,225</b>
Regular	883,919	888,624	962,734	1,156,007	1,148,108	1,073,183	895,968	736,584	707,049	589,489
Sickness	31,093	32,371	32,728	31,267	32,116	32,445	34,523	35,720	34,796	34,455
Maternity	49,399	52,504	55,820	55,528	57,918	55,708	54,263	53,535	51,618	48,694
Retirement	1,714	1,686	1,278	—	—	—	—	—	—	—
Fishing	14,998	17,838	16,795	17,074	15,067	12,675	11,938	10,363	9,790	11,693
Training	22,629	24,722	27,668	34,588	71,876	64,207	68,023	68,741	57,559	44,928
Work sharing	4,632	5,956	17,237	36,640	23,396	11,431	4,995	3,370	3,891	1,664
Job creation	6,277	5,746	5,827	5,652	5,308	4,768	5,381	6,698	4,708	3,498
Adoption	..	..	368	433	313	304	294	343	359	330
Parental	..	..	..	28,142	33,513	32,811	32,584	32,402	32,043	30,427
Self-employment assistance	..	..	..	..	..	4,387	6,839	9,214	8,981	7,428

Source: Statistics Canada, CANSIM, matrix 5705.

## 7.22 Employment Insurance Average Weekly Payments

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
\$										
<b>All benefits</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>...</b>	<b>253.14</b>
Regular	199.02	212.47	230.00	244.48	252.81	256.02	251.80	252.96	255.32	249.72
Sickness	217.05	228.09	239.42	248.47	255.13	255.32	245.52	245.24	246.81	232.73
Maternity	218.55	232.10	245.98	260.67	272.66	275.57	273.53	274.78	274.70	272.42
Retirement	260.01	277.28	242.49	—	—	—	—	—	—	—
Fishing	300.73	316.66	333.93	352.49	372.42	377.89	380.61	402.93	403.12	365.63
Work sharing	70.07	69.71	73.90	81.34	89.16	88.22	83.68	83.10	79.81	86.25
Adoption	259.65	275.58	293.41	323.22	331.00	341.99	340.80	348.67	346.50	335.75

Source: Statistics Canada, CANSIM, matrix 5704.



**7.23 Labour Force<sup>1</sup> and Paid Workers Covered by a Registered Pension Plan (RPP)<sup>2</sup>**

	1983	1985	1987	1989	1991	1993	1995
<b>Both sexes</b>							
Number of RPP members	4,564,623	4,668,381	4,845,107	5,109,363	5,318,090	5,214,647	5,149,912
% of labour force	36.0	35.3	35.3	35.9	36.7	35.4	34.3
% of paid workers	45.4	43.9	42.9	42.7	45.4	44.6	42.4
<b>Men</b>							
Number of RPP members	3,039,449	3,047,160	3,082,391	3,128,225	3,129,263	2,966,086	2,894,564
% of labour force	40.8	39.9	39.4	39.0	38.9	36.4	35.1
% of paid workers	52.4	50.1	48.4	47.0	49.2	46.8	44.0
<b>Women</b>							
Number of RPP members	1,525,174	1,621,221	1,762,716	1,981,138	2,188,827	2,248,561	2,255,348
% of labour force	29.1	29.1	29.9	31.8	34.0	34.1	33.5
% of paid workers	35.9	35.6	35.8	37.4	40.8	41.9	40.6

1. The data used from the Labour Force Survey are annual averages, to which the number of Canadian Forces members was added. The difference between the labour force and paid workers is equal to the sum of unpaid family workers, self-employed persons (in unincorporated companies) and unemployed persons.

2. Registered pension plans are as of January 1. They are plans established by either employers or unions to provide retirement income to employees.

Source: Statistics Canada, Catalogue no. 74-401-XPB.

**7.24 Canada Pension Plan Average Monthly Benefit Payments,<sup>1</sup> 1997**

	Combined	Retirement	Disability	Child's	Survivor's	Orphan's	Death
				\$			
<b>Canada<sup>2</sup></b>	<b>544</b>	<b>400</b>	<b>664</b>	<b>167</b>	<b>249</b>	<b>167</b>	<b>2,611</b>
Newfoundland	478	342	657	167	247	167	2,366
Prince Edward Island	458	326	620	167	224	167	2,083
Nova Scotia	520	386	646	167	251	167	2,581
New Brunswick	489	358	640	167	242	167	2,440
Quebec	540	356	681	167	266	167	2,582
Ontario	562	421	665	166	253	167	2,691
Manitoba	519	377	661	167	241	167	2,433
Saskatchewan	499	374	669	167	232	167	2,364
Alberta	535	391	672	167	245	167	2,579
British Columbia	544	398	682	167	251	167	2,589
Yukon Territory	582	406	661	167	249	167	2,462
Northwest Territories	519	329	677	167	247	167	3,281
Outside Canada	472	227	627	167	239	167	2,374

1. Does not include benefits paid by the supplementary cheques system or under international agreements on social security.

2. Includes benefits paid outside Canada.

Source: Human Resources Development Canada, *Canada Pension Plan & Old Age Security Statistical Bulletin*, March 1997.



## *Arts and Leisure*

### **C h a p t e r**

### **E i g h t**

*The 1990s have been years of almost mesmerizing success for Canadian writers, singers and movie makers alike. Anne Michaels' novel **Fugitive Pieces** won international praise with Britain's Orange Prize and the American Lannan Literary Award, and domestic acclaim with Ontario's Trillium Prize.*

*Margaret Atwood's **Alias Grace** and Rohinton Mistry's **A Fine Balance** were in the running for Britain's Booker Prize, and*



Nancy Huston's *Instruments des ténèbres* was short-listed for France's Prix Goncourt. Quebec's Ying Chen was shortlisted for le prix Fémina and Kathy Reichs, also from Quebec, made Canadian and American best-seller lists with her novel *Déjà Dead*. Last but not least, Michel Tremblay's most recent novel, *Un objet de beauté*, won accolades both in Quebec and France.

Canada's musical artists have followed suit. In the 1990s, Céline Dion, Shania Twain and Alanis Morissette together sold more than 56 million albums.

In 1997, the film version of Michael Ondaatje's novel *The English Patient* swept the Oscars, winning a total of nine Academy Awards. Atom Egoyan was awarded the Cannes International Critics' prize for *The Sweet Hereafter*.

Fittingly, a point of reference for all this success is found in Anne Michaels' novel *Fugitive Pieces*. "Nothing is sudden," she writes. "Just as the

earth invisibly prepares its cataclysms, so history is the gradual instant." In Canada, the "gradual instant" has much historic precedent. We can go back to the turn of the century and the days of the famed Mary Pickford, a Canadian from Toronto, to find our roots in cinematic performance, literary pursuits and drama.

As early as 1797, the Halifax Chess, Pencil and Brush Club encouraged its members in the activities its title suggested, while in St. John's in 1880, book lovers had to join a waiting list before they could get into the Eclectic Reading Club. In Saint Boniface, Manitoba, in 1925, le Cercle Molière began presenting plays in French and continues to do so today.

Similarly, with Canadian sporting achievements, we can trace the Olympic successes of runners Donovan Bailey, Robert Esmie, Bruny Surin and Glenroy Gilbert to earlier athletic achievements.

In 1879, for example, the McGill University Hockey Club in Montréal became Canada's first organized hockey team, playing a game that has become synonymous with Canada itself. Twelve years later, James Naismith of Almonte, Ontario, invented a tackle-free game of skill that also caught on: basketball. In 1936, basketball became an official Olympic sport.

Whether it's the 1928 Olympic victories of Percy Williams or the founding of sports clubs, Canada has an athletic legacy.

## GOVERNMENT SUPPORT

In 1951, one of Canada's foremost literary figures, Robertson Davies, issued a warning to a government commission on cultural activity: "Canada will not become great by a continued display of her virtues for virtues are—let us face it—dull. It must have art if it is to be great." The Massey commission eventually concluded that government had a role to play in the support of arts and leisure. One direct result was the creation, in 1957, of the Canada Council, now known as the Canada Council for the Arts.



The Glenbow Archives, Calgary, Canada, NA 299-7

The Battleford Industrial School Football Team, 1897.



Today, all levels of government in Canada support culture. The federal government helps through grants, tax measures and through the support of special programs like those of the Canada Council. Since 1989–90, total federal spending on culture has been about \$2.9 billion a year, or just under \$100 a year for every Canadian.

In recent years, there have been internal shifts in how this money is spent. Between 1990 and 1996, federal support for the literary arts declined almost two-fifths, from \$239 million to \$146 million. During the same period, support for cultural industries (these include broadcasting, film and video, sound recording and publishing) increased about 5% to just over \$2 billion.

In 1995–96, provincial and territorial governments spent \$1.8 billion on culture while municipal governments spent an additional \$1.4 billion. When combined with the federal total of \$2.9 billion, this represents a cultural spending power of \$6.1 billion.

## THE ARTISTS

“What do you want, Frances?”

“A job.”

He starts to laugh again but Frances just looks him steady in the eye.

He shuts up and asks, “What can you do?”

“I can dance. I can sing and play piano.”

He looks her up and down. “What else?”

She twists her mouth into a sneer she hopes is hard as nails.

“I can do anything.”

He gives a short chuckle. Then another, and nods.

“You’re all right, Frances.”

In Canada, culture is both created and consumed daily. The result of our encounters with each other, with the land and with the vagaries of our climate, it is also a way of life. In this excerpt from Ann-Marie MacDonald’s

*Fall on Your Knees*, we find a telling description of our artists: multi-talented and often willing and able to work at more than one job at a time.

Artists in Canada write, perform, design, create, curate and teach. Many of them are well educated (50% are university graduates), about 60% are self-employed, and they are generally young (61% are under the age of 44). On average, Canadian artists earn about \$24,000 a year, slightly below the national average of \$29,000.



Margie Gillis dances.

Photo by Lois Greenfield

## *I n t h e W i n g s*

*“No money as always.*

*To leave rehearsals and go into the office was to be flung from the honeycomb of art into the mouth of debt and scarcity, the mewling, grasping, angry mouth of a starving child.*

*The theatre was now months behind on its rent; there was talk of the landlord padlocking the door, talk of the bank stopping its line of credit. Jimmy called it a cash-flow crisis. At night he attended meetings with board members and drew up strategies that went nowhere, because all that was needed was huge infusions of cash to make up for cutbacks, and everybody, from charities to the symphony, was fighting for the same pots of corporate money.*

*At night Jimmy looked through roof-repair estimates and gave in to despair, admitted that the theatre might close, raged against the world, gave pep talks to his staff, most of them out-of-work actors who phoned creditors with box-office projections that were pure fantasy.*

Generally, incomes of all artists rank below the Canadian average. Visual artists earn the lowest; in 1993, painters and sculptors earned an average of just \$7,800 a year and craftspeople not much more, at an average of \$12,300. (Many also report earnings from other jobs.) At the other end of the spectrum, culture teachers and managers had incomes well above the national average. Altogether, about a million Canadians work in the arts and culture sector.

For a cultural industry to survive, there must be a market for its products. It would appear that the market is a fairly vigorous one in Canada, not only in terms of what we are spending on recreation but also in our attendance at cultural events and heritage sites. In 1996, Canadian households spent an average of about \$2,600, or 5% of the budget, on recreation, up 15% from 1992. Mostly, this spending shows our growing affinity for gadgets, be they computers, cameras or sports equipment. We also, however, like to step out. Spending on entertainment and performances rose more than one-third to \$430 per household. While the main reason for the increase was due to cable television charges, there was also more spending on admissions to movie theatres and live performances such as concerts.

### **The Performers**

Since 1989, a chandelier weighing 600 kilograms has come crashing down on the stage at the Pantages Theatre in Toronto at every performance, bringing the first act of *The Phantom of the Opera* to a dramatic close. Eight years and 3,345 chandelier-falls later, the theatre has sold more than 6 million tickets for this spectacle, the Canadian cast recording has sold more than 800,000 copies, and the box office has taken in \$565 million.

In 1997, in St. John's, two women produced the first St. John's Fringe Festival. With a one-time grant of \$25,000, they staged 15 productions in five days—and box office receipts were to be kept by the performers.

Canadian theatre exists somewhere between the Phantom and the fringe.

In fact, Canadian theatre accounts for nearly half the economic activity in the performing arts. Its recent history can be told in three acts. Act I is the founding of Ontario's Stratford Festival in 1953. Act II is the start of a network of regional theatres founded in the 1950s and 1960s. Act III is the development of a commercial theatre scene in large urban centres including Montréal, Toronto, and most recently, Vancouver. In fact, Toronto is now listed as the third largest centre for English language theatre in the world, after New York's Broadway and London's West End.

In Quebec, a thriving theatre scene is also making international waves. There is the work of Normand Chaurette whose play *Les Reines* has found its way to France's famous Comédie-Française, in addition to charming audiences in capital cities throughout Europe and whose *Le Passage de l'Indiana* made a huge splash at the Avignon Festival in 1996. Carole Fréchette's play *Les Quatres Morts de Marie* is staged regularly in France, as are the works of Robert Lepage, Denis Marleau and Gilles Maheu.

In 1994–95, there were 293 not-for-profit theatre companies and Canadians were happy to see their productions, picking up 8.5 million tickets to do so. Total revenues were \$183 million. Of these, half came from the box office, a third from public grants and the rest from private donations and corporate sponsors.

To provide a portrait of all performing arts in Canada, Statistics Canada looks at the activities of Canadian not-for-profit companies. These groups present not only theatre, but also music, opera and dance; there were almost 500 of them in 1994–95.

Their struggles and their accomplishments over the last 20 years reflect the shifts in patterns of support. For example, in the 1970s, approximately 40% of the funding received by these companies came from the federal government. Today, this has dropped to 27%, while revenues from foundations, private donors and corporate sponsors are up.

*That was what he did at night. In the daytime he worked in a large, well-lit room, helping talented and immensely delicate human beings speak four-hundred-year-old words.*

*This schizoid life was so familiar to Jimmy that he never questioned it. If he wasn't in crisis, he didn't feel alive; if he wasn't in a state of terror, he stopped producing. And nobody out there cared one way or the other. It was like living in a medieval morality map of his own making: he made the swamp of malodorous sinners, he made the angels sing in the clouds, he made the world in the shape of his character."*

*Excerpt from In The Wings, by Carole Corbeil. The setting for this novel is contemporary, as a Toronto theatre company produces Hamlet.*





Photo by Susan King

Claire Coulter, actress.

Sponsorships have become much more important, although new legislation passed in 1997 now limits those connected with tobacco products.

Although profit is not the only measure of success for these arts companies, the bottom line has been improving. At the start of the 1990s, performing arts companies were running deficits of close to \$6.5 million. By the mid-1990s, these had been reduced to less than \$1 million.

This sector relies heavily on volunteers. In 1994–95, more than 26,500 volunteers joined the more than 45,000 people who work for pay in the performing arts labour force.

## MUSIC, DANCE AND OPERA

The colourful conductor of the Winnipeg Symphony Orchestra, Bramwell Tovey, has stated that to get even more people out to the symphony, there is work to be done on the image of classical music. “We’re still wearing the tails of the 19th century,” he says, “while the challenge is to create the audience of the 21st century.” Yuli Turovski, who is the founder of Montréal’s chamber orchestra I Musici, has written “just as much as the body requires food, so too does the soul require music”.

Both sentiments find resonance in the statistics. In 1994–95, music organizations reported an attendance of 3.2 million people at more than 4,000 musical performances. Revenues came to \$114 million: 42% from the box office, 37% from grants and the remaining 21% from private and corporate donations. With some 18 opera companies, another 111 music groups and 71 dance companies, Canadians have much choice in terms of cultural entertainment. (All of these groups are identified as not-for-profit.)

Canada’s foremost classical and contemporary ballet companies are well established and include the Royal Winnipeg Ballet (founded in 1941), The National Ballet of Canada (1951) and Les Grands Ballets Canadiens (1958).

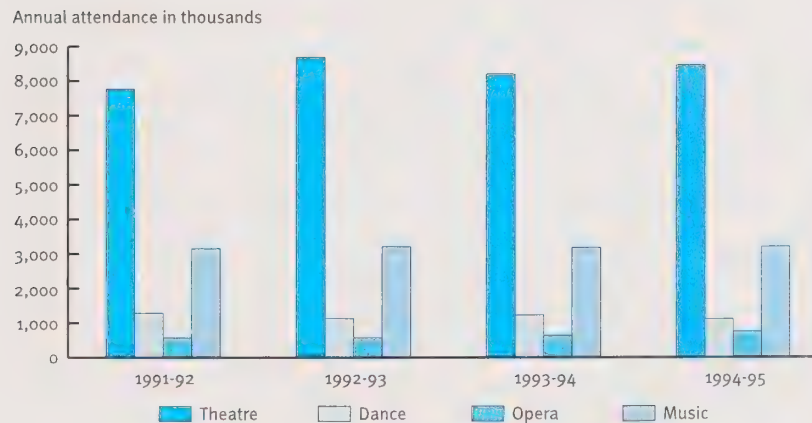


If the symphony isn't the ticket, there's always dance: in 1994–95, dance companies presented more than 2,100 performances, playing to audiences totalling more than 1.1 million people.

In 1994–95, dance companies earned revenues of \$56 million, of which box office income and grants each accounted for roughly 40%, while the remaining 20% came from corporate sponsors and private donations. Also in 1994–95, volunteers with Canada's dance companies actually outnumbered paid staff by 10% and these dance companies managed to produce a small surplus that year.

Meanwhile, in 1994–95, opera companies presented more than 900 performances, selling 750,000 tickets. Their expenses came to

#### The play's the thing



Source: Statistics Canada, Catalogue no. 87-211.

## Canada's Marks Brothers

*From the 1870s to the 1920s, Christie Lake, Ontario, was the centre of a flourishing theatrical empire run by the Marks Brothers. Robert, George, Tom, Joe, Ernie and Alex Marks produced and performed some of the most popular plays of their time.*

*Imported melodramas were the order of the day: Ten Nights in a Bar Room, East Lynne, or Uncle Tom's Cabin. At the height of their success they had several companies on the road at the same time, on different circuits, travelling and performing across Canada and in the border states for much of the year.*

*The secret to their success? They never forgot their small town roots. They let the large touring companies from New York and Chicago play the bigger cities. When the Marks Brothers arrived in town, a marching band would announce their arrival to one and all. Having found a formula that worked, they kept to it.*

*But tastes change. They began to lose their audience when "the flickers" arrived. In 1922, the curtain fell for the last time on a Marks Brothers production.*

\$40.3 million while total revenues were \$40.5 million, almost half of which came from the box office. Grants accounted for 30%; donations and sponsorships made up the remainder. Overall, opera in Canada is a debt-free enterprise.



Photo by Brian Smale

**La La La Human Steps.**

## AT THE MOVIES

On June 27, 1896, in a darkened room at 78 rue Saint Laurent in Montréal, viewers witnessed something never seen before in Canada: a “moving picture.” The *Cinématographe* was the invention of the Lumière brothers of Paris and this first audience saw a series of minute-long films, including footage of a train arriving at a station, a boat at sea, and the Lumière brothers playing cards.

In the years that followed, Canadian audiences were to see films of music-hall performances and circus acts, the trick photography of the Méliès Brothers from France, as well as Canadian news events such as the 1907 Québec Bridge disaster near Québec, shot by Léo-Ernest Ouimet, a major figure in the history of Canadian cinema.

The era of the great movie palaces began in the early 1900s. In 1906, Ouimet constructed the Ouimetoscope, the first permanent cinema in Montréal. In the 1920s, Jules and Jay Allen of Brantford, Ontario built a chain of 53 movie theatres across Canada, although in 1923, these theatres were acquired by an American company. Today, many of the picture palaces of the past have been converted into multiple-screen theatres or sit abandoned and drive-ins have all but disappeared.

The Canadian public has had an on-again, off-again love affair with the silver screen. In 1952, at the apex of cinema’s popularity in Canada, there were some 256 million admissions to the movies and drive-ins. While the movies have not had this kind of draw since, and in fact have lost audiences in the intervening decades, Canadians appear now to be back in line at the box office. In 1995–96, movie admissions, including those for the few remaining drive-ins, came to 87 million, up some 15 million from the start of this decade.

However, there are now fewer movie theatres. In 1955, a banner year for the movies, there were 1,950 movie theatres in Canada. In 1995–96, there were just 590. In the late 1960s, there were 253 drive-in theatres. In the early 1990s, there were 103, and today there are about 77.

In 1995–96, moviegoers spent \$418 million at the box office and an additional \$167 million at the popcorn stands, providing theatres and drive-ins with a 10% profit margin. There are about 10,000 people at work in Canadian movie theatres.

Investment policy guidelines put in place in 1988 keep the distribution of movies in the hands of Canadian-owned companies by limiting what foreign-owned firms can distribute in Canada. In 1992–93, Canadian-controlled distribution companies captured only 17% of the revenues from distributing films to movie theatres; by 1994–95, that share had increased to 24%.

Most of what Canadians see at the movies comes from other countries. Canadian films account for about 5% of the available screen time in Canadian cinemas.

In terms of production, Canadian feature films make up less than 1% of total Canadian film and video production, but they still make waves at international festivals, as filmmakers David Cronenberg, John Greyson, Atom Egoyan, Robert Lepage and others have experienced. In 1994–95, producers brought 38 feature films to production, 19 of them from Quebec.

Indeed, Quebec cinema is gaining international attention, as the numerous awards and nominations that its filmmakers have received readily attest. In recent years, the credits have rolled: Denys Arcand for his *The Decline of the American Empire* and *Jesus of Montréal*; Jean-Claude Lauzon for his *Léolo*, *Un Zoo, la nuit*; François Girard for *Le Dortoir*, *Thirty-Two Short Films About Glen Gould*; and Frédéric Back for *Crac* and *L'Homme qui plantait des arbres*, both animated films.

Canada's acclaimed National Film Board continues to adjust to reduced funding. In 1995–96, the Board received \$77 million in government



Photo by E.C. Goodenough, National Archives of Canada, C-52029

Canadian screen legend Mary Pickford, in the 1920s.

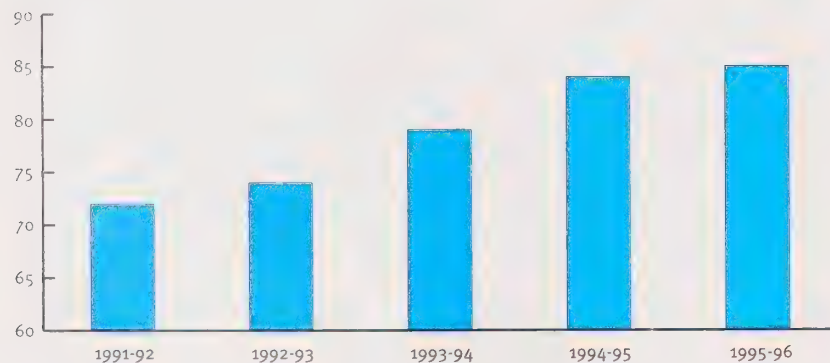


funding and with a work force of about 518 people, shot 110 productions, rented out almost 200,000 films and videos, and received 99 awards. In 1996–97, its parliamentary appropriation was cut to \$72.8 million. Nonetheless, it produced 102 productions and co-productions in 1996–97 and received 104 awards. Almost 4,000 Canadian television broadcasts featured National Film Board productions.

Filmmaking is an increasingly international venture and Canadian participation in co-productions is growing. In the early 1980s, Canadian producers signed only five co-production agreements. By 1996, Canadian filmmakers were part of 32 co-production agreements involving 44 countries. Similarly, investment in the film industry is increasing. Between 1991–92 and 1994–95, Canadian investment in film and video production grew by a third, reaching \$421 million, while foreign investment tripled to \$212 million.

#### Movies reel us in

Annual attendance in millions



Source: Statistics Canada, Catalogue no. 87-211.

Canada exports film talent as well as films. Celebrated for their technical and creative know-how, graduates of Canada's animation programs at colleges, especially those in Ontario and British Columbia, are working in major international animation studios, as well as for animation studios in Canada. Canadian technical and creative expertise placed Tom Hanks alongside John F. Kennedy in *Forrest Gump*, changed the shape of Jim Carrey's face in *The Mask*, and created characters and other special effects for Disney's animated feature *The Hunchback of Notre Dame*.

## RADIO AND TELEVISION

Two of the most powerful forces on the Canadian arts scene are generally found in the home: radio and television. In 1996, Canadians listened to an average of 20 hours of radio a week and watched an additional 23 hours of television. Generally, the programs were aired by a mix of publicly funded and commercial stations and networks.

Radio tastes vary. From 1991 to 1995, stations offering an easy-listening format lost 70% of their share of listeners, while album-oriented rock stations lost 42% of theirs. Where these listeners go is a matter of conjecture, but during the same period, talk radio experienced a 15% increase in its market share and country music, a 9% increase.

Television tastes are split between foreign and Canadian programming. In 1995, Canadians spent as much time watching foreign comedy and drama as we did watching all Canadian programming combined.

Tastes aside, the business case for both radio and television has been on fairly fragile ground. For example, in 1995, commercial television air-time sales met operating costs only for the first time since the late 1980s. Also in 1995, Canada's 100 commercial television stations reported \$44 million in profits on an overall revenue of \$1.5 billion, a post-tax profit margin of only 2.8%. Canada's 495 commercial radio stations, however, reported



collective losses of \$4.3 million on overall revenues of \$780 million.

## The Canadian Broadcasting Corporation

At a cost of about \$0.08 a day for every Canadian, the publicly funded Canadian Broadcasting Corporation (CBC) provides national radio and television services in English and French, a 24-hour cable news service in English and another in French, a Northern service in eight Aboriginal languages, and Radio Canada International, a shortwave radio service that broadcasts around the world in seven languages. In 1996–97, the CBC's federal government allocation was \$855 million, a drop of \$110 million from the previous year.

The CBC has been called the “ribbon of reason” that holds Canada together, just as the railway was once our “ribbon of steel.” But the CBC, which includes some 22 television stations and 68 radio stations, has been under its own financial strain. Between 1994 and 1998, it faced an estimated shortfall of more than \$400 million and between 1996 and 1997, cut 1,300 employees.

In 1997, the CBC celebrated 60 years of public broadcasting and in spite of its difficulties was able to boast a 90% Canadian television content schedule in prime time.

## RECORDED MUSIC

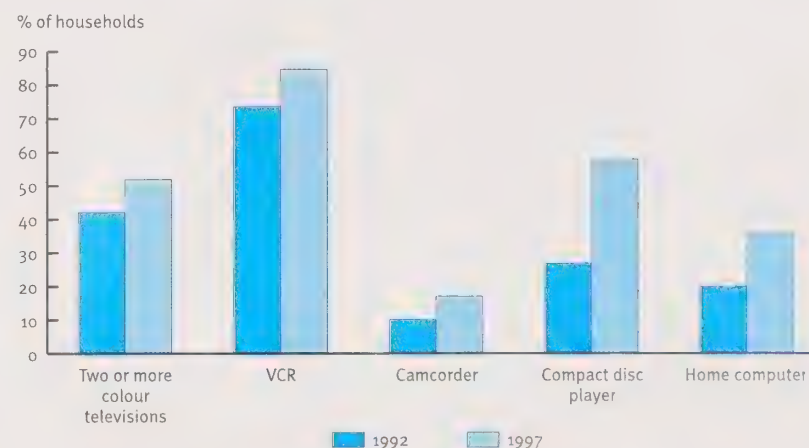
In 1996, a four-CD compilation of Canadian pop music called *Oh What a Feeling* went straight into the top 10, selling more than 250,000 copies, and became the first boxed set in Canadian music history to receive “diamond” status. As a world supplier, Canada is the second-largest producer of French-language recordings after France, and the third largest producer of English language recordings after the United States and the United Kingdom.

The United States and Europe are, not surprisingly, the key foreign markets for the Canadian music industry. France is the single most important market for the Quebec industry, which received an important boost when France introduced a quota requiring its radio stations to reserve 40% of their air time for French-language music of any nationality.

In 1993–94, Canada's record companies released 6,300 recordings and earned \$860 million in revenues. Although only a very few record companies are owned by foreign companies, these latter earned 80% of all revenues.

From 1989 to 1994, releases with Canadian content increased in number by 17%, and in revenues by 155%. Interestingly, during this time period, the Canadian content share of total releases actually declined from 14% to 11%, given the faster pace of growth in foreign releases. Even so,

### Glorious gadgets



Source: Statistics Canada, Catalogue no. 64-202.

## *F o r   t h e   R e c o r d*

*The man who changed the shape and direction of recorded music—quite literally—from a factory in Montréal, was Emile Berliner. In 1900, this German-born inventor modified the sound-recording technology of the day, which consisted of a pick-up needle travelling over a rotating wax cylinder.*

*Berliner exchanged the cylinders for flat discs made of a much sturdier substance: vulcanite. Eventually his vulcanite discs became known as “78s” because of the speed at which they were played: 78 revolutions per minute. They were the precursors of today's CDs.*

*At first, Berliner produced his 78s from master recordings imported from Europe and the United States. In 1900, his first releases featured God Save the Queen, followed a year later by God Save the King.*

more Canadian recordings are being released and they're selling well. The Canadian content share of total recording-related revenues almost doubled from 1989 to 1994, increasing from 6% to 11%.

## **THE PRINTED WORD**

If you walked into a bookstore or visited a newsstand in Canada, you would see a surprising number of home-grown titles on the shelves. Publishers' profits are not always healthy, but interest in Canadian books and magazines is high, and government policies and grants lend support to these industries.

### **Books**

Quite apart from the creative vigour of Canada's writers and their successes of late, the business of book publishing tells another story. More than a quarter of Canadian publishing companies are unprofitable. In 1994–95, for all publishers, profits averaged 7.0% of revenues. This is an improvement over 1991–92, when profits averaged only 3.6%. In 1994–95, more than two-thirds of Canada's publishers received some form of government aid.

In 1994–95, sales in Canada by publishers and exclusive agents were \$1.4 billion, while Canadian publishers earned an additional \$370 million through exports and foreign sales. At the same time, Canada's readers could choose from 11,000 new and 7,477 reprinted titles published in Canada.

To arrive at this picture, Statistics Canada surveys 326 publishers (some of whom are both publishers and exclusive agents) and 40 exclusive agents with book publishing revenues of \$50,000 or more. Agents operate on behalf of foreign publishers, marketing their books in Canada. They also work on contract with Canadian publishers to market the latter's books in Canadian bookstores. In 1997, the role of agents was strengthened through

new federal regulations which prevent foreign publishers from selling books in Canada without an exclusive agent.

## Magazines

In 1995, the Canadian government imposed an 80% tax on revenues of magazines with an editorial content less than 80% Canadian. The following year, the U.S. government complained to the World Trade Organization that together with Canada's postal subsidies to magazines—approximately \$58 million in 1996–97—this tax was a violation of the rules of international trade. In 1997, the World Trade Organization ruled in favour of the United States and Canada agreed to change its regulations.

The dispute revolved around what is called a “split-run” edition of a magazine: a magazine prepared in the United States but published as a “Canadian” edition, with virtually the same content as the American version, and with space dedicated for Canadian advertisers.

In addition to split-run magazines, Canada's readers have a choice of many home-grown magazines. In fact, there were about 1,404 periodicals published in 1994–95, mostly in English and French, with a few in Chinese or Punjabi, Portuguese, Italian and so on. Total revenues came to \$860 million.

It is interesting to note that the smaller French-language magazine industry (with almost 300 periodicals and a total annual circulation of 114 million) is twice as profitable as the English-language sector (with almost 850 periodicals and a circulation of 357 million)—earning a 13% profit before taxes, compared with just 6% for English-language magazines. Only 900 people work full-time for French-language periodicals, while more than 3,000 are employed full-time with English-language magazines. In Canada, francophones make up about 24% of the total population, while French periodicals, including those which are bilingual (226), make up nearly 40% of the total Canadian periodical market (1994–95).

*Berliner also recorded Canadian artists, including baritone Joseph Saucier, and popular Canadian compositions like The Maple Leaf Forever. In 1904, he recorded Ho-nu-ses, an Iroquois chief, singing ancient tribal songs. Berliner catered to all tastes, releasing an estimated 2,000 recordings between 1900 and 1905, including When Father Laid on the Carpet Floor, and I'm Old, But I'm Awfully Tough.*

*After 1905, Berliner's original single-sided discs, 17 centimetres in diameter, were superseded first by 25-centimetre discs and then by double-sided discs with a diameter of 30 centimetres. This enabled them to contain even more music. Berliner's gramophone recordings, manufactured in Montréal, established the playback format that remains dominant today: one-sided discs that spin.*





*City of Toronto Archives, William James Collection, SC 244-7339*

**Skinny dipping in Toronto's Don River, near the Bloor Street Viaduct, 1910.**



## LIBRARIES

One of the most common cultural centres in Canadian communities is the public library. Public libraries have been supported with public funds since 1882, when Ontario's "free books for all" movement began to spread across the country. There is no official count on the number of Canadian libraries (recent estimates vary from almost 4,000 to more than 6,000).

Libraries in Canada are funded primarily by local government. In 1994–95, municipal governments spent \$1.1 billion on libraries and provincial governments spent an additional \$707 million. The federal government spent \$38 million on libraries, including the National Library of Canada. The National Library, which was established in 1953, acquires every publication ever released in Canada.

## HERITAGE

Canada's heritage sites form an important part of our culture. In 1995–96, these sites—some 2,390 institutions including museums, nature parks and historic sites—logged 113 million visits. Although one in three heritage sites charged admission, attendance still increased 2% from the year before.

Visitors spent \$336 million on admissions, in the cafeterias and at the souvenir shops. Operating revenues for heritage institutions, excluding nature parks, approached the \$1 billion mark, but so too did operating expenditures: these institutions came out ahead by \$12.6 million. Nature parks and conservation areas recorded attendance around the 58 million mark; while earned revenue was \$87 million, of which \$38 million came from admission receipts. Even with increased revenue, the bulk of operating revenues still came from government funding. In 1995–96, federal, provincial and municipal support to heritage institutions, nature parks and conservation areas came to \$790 million.

Volunteers play a major role. In 1995, some 58,000 volunteers worked alongside 12,000 seasonal workers, 13,000 full-timers and 19,000 part-timers.

In 1997, in France, the first ever "offshore" Canadian national historic sites were inaugurated to commemorate the Canadians who died in the First World War. Beaumont–Hamel honours the 1st Newfoundland Regiment, virtually wiped out at the Battle of the Somme on July 1, 1916, and the site at Vimy Ridge honours the more than 60,000 Canadians who died in the First World War.

## FESTIVALS

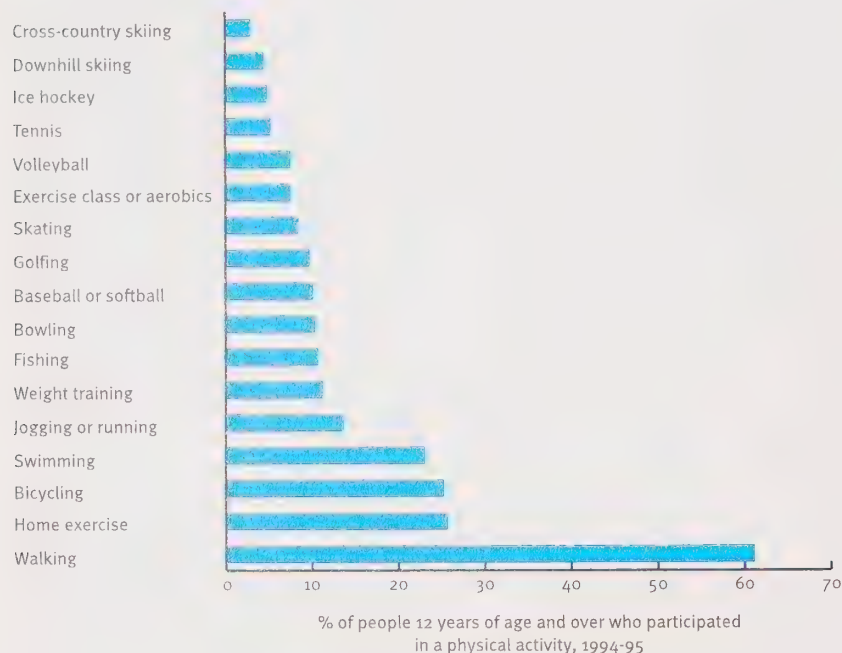
It seems that festivals beget festivals. In 1958, Miramichi, New Brunswick, established a traditional folk music festival. Orillia, Ontario, followed with



*Whyte Museum of the Canadian Rockies, Byron Harmon Collection, V263/NA71-1139*

**Philmaster Proctor on the shore of Lake Maligne, 1911.**

### Most popular exercises among Canadians



Source: Statistics Canada, Catalogue no. 87-211.

the first Mariposa Festival in 1961, and Canada's largest folk festival, in Winnipeg, began in 1974. Edmonton staged Canada's first fringe theatre festival in 1982.

Now there is a circuit of fringe festivals from St. John's, Newfoundland, to Victoria, British Columbia. Some cities seem to be constantly in festival mode. Montréal, for example, hosts the Just for Laughs International Comedy Festival, the Fringe Festival and the Festival Internationale de Jazz, to name just a few of its annual offerings.

In 1994-95, some 150 of Canada's festivals received \$83 million in federal support. The entertainment may feature jazz, buskers, comedy, visual art and dragon boats. It can range from such events as Gimli's *Íslendingadagurinn* to Edmonton's Heritage Days. In fact, these are just two of the more than 150 festivals that now take place in Canada.

### KEEPING FIT

"Somewhere in our souls is a spiritual Canada. Most probably, its bedrock is of snow and ice, winter and the land. And if we were to penetrate it a little deeper, chances are we would find a game."

Sport in Canada, according to authors Ken Dryden and Roy MacGregor (*Hockey and Life in Canada*) is more than just a game. It's about physical activity, health, participation, discipline and achievement. For a select few, it's about career.

In 1994-95, close to 52% of Canadians who were 12 years and older participated regularly in some form of physical activity. That's almost 13 million Canadians who regularly swam, cycled, skied, golfed, jogged, fished, bowled, played hockey and more. Only 8% reported no activity within the previous three months.

## *The Backyard Rink*

*The backyard rink may be as much a symbol of Canada as the flag or the loon—or hockey. Wherever there's winter, enough space near a house and kids who love to shoot a puck, a backyard rink is bound to spring up.*

*Hockey great Jean Beliveau: "I remember growing up as a young lad in Victoriaville, Quebec, and playing in our backyard. I remember listening to Hockey Night in Canada in the 1940s, and I remember when Maurice Richard scored 50 goals in 50 games in 1945. The next morning, we woke up and staged our own Hockey Night in Canada, complete with mock broadcast."*

*For Wayne Gretzky, another hockey*

*aristocrat, his backyard rink in Brantford, Ontario, came complete with floodlights.*

*"All I wanted to do in winters was be on the ice," he writes in his autobiography.*

*"I'd get up in the morning, skate from 7:00 to 8:30, go to school, come home at 3:30, stay on the ice until my mom insisted I come in for dinner, eat in my skates, then go back out until 9:00."*

*As far as Gretzky was concerned, a backyard rink was a given: "Didn't every kid's father flood the backyard in the middle of winter, put up floodlights, set up nets and have hockey games from noon until ten at night?"*

*There is an art to the backyard rink, quite literally. One of the best known hockey*

*paintings in the world, "At the Crease," was created by Canadian artist Ken Danby. In this study, a solitary goalie prepares for the onslaught bearing down on him.*

*Outdoor rinks still hold a special place in the winter lives of Canadians, young and old. Hockey is the single most popular sport in Canada. More than 6% of all adult Canadians play hockey regularly; almost all (97%) are men.*

*For many Canadian kids, the backyard rink is as much about figure skating and crack-the-whip as it is about learning to stickhandle. For a select few, it may well be the first step in a journey to the Stanley Cup finals or the Winter Olympics.*



Walking, swimming, biking and home exercises are the most popular activities for men and women alike. Some preferences were gender-driven. For example, three times as many men played golf as did women, while women were two and one-half times more likely to do aerobics than were men. Men were twice as likely to play baseball or softball than women.

Canadians spend more money on doing than on watching. In 1994, Canada's sports and recreation clubs and services brought in \$2 billion in revenues while commercial, professional spectator sports brought in just \$1 billion. Included in the clubs and services total are Canada's golf courses, which earned fractionally more than the commercial spectator sports organizations. Skiing facilities brought in \$420 million, horse race tracks earned \$382 million and bowling centres and billiard parlours earned \$345 million. Boat rentals and marinas earned \$244 million.

## ORGANIZED SPORT

In 1996–97, the federal government's Sport Canada directly supported 592 men and 433 women through the Athlete Assistance Program. The program funds Canada's elite international athletes who have met a performance standard. In 1996–97, the program spent \$7 million in the pursuit of athletic excellence.

In addition, Sport Canada spent an additional \$20 million through 38 national sports organizations, supporting activities from alpine sports to yachting. Approximately 20 organizations support athletes with disabilities. There are 11 "multi-sport" organizations in Canada. They include the Canadian Paralympic Committee and the Canadian Association for the Advancement of Women in Sport. In 1996–97, they received \$7.5 million, some 30% of which went to the Coaching Association of Canada and 30% to the Canadian Centre for Ethics in Sport.

As with culture, governments at all levels support sports and leisure. In 1993–94, together, they spent more than \$4 billion. Volunteers play a

major role here, too, as they do in the cultural sector. In a 1986 survey, volunteers carried out 1.5 million jobs in the sports and recreation sector.

## PROFESSIONAL SPORTS

Canadians can watch their own professional sports teams year-round. Most major cities have at least one professional sports franchise, often with a long history and tradition. Fan rivalries, such as those between supporters of the Toronto Maple Leafs and Montréal Canadiens hockey clubs, are the stuff of Canadian legends. In hockey season, being glued to the television or radio to catch a Saturday night game has been a tradition in Canada since the dawn of broadcasting.

### Football

The Canadian Football League is a mix of community-owned and privately owned teams. The Winnipeg Blue Bombers, the Edmonton Eskimos and the Saskatchewan Rough Riders are community-owned. The Montréal Alouettes, the B.C. Lions, the Toronto Argonauts, the Hamilton Tiger-Cats and the Calgary Stampeders are privately owned. The culmination of the Canadian Football League's season is the Grey Cup, which is televised nationally and is traditionally one of the highest rated television broadcasts of the year. Its student equivalent is the Vanier Cup, administered by the Canadian Intercollegiate Athletic Union and competed for by student teams organized in four leagues across the country.

The playing field for Canadian football may be larger than its American counterpart but the Canadian Football League is shrinking. Earlier in the 1990s, the league expanded into the United States, but after a series of franchise failures, this experiment in expansion came to a halt. In 1997, the Ottawa Rough Riders ceased operations.

## Hockey

"[T]his combination of ballet and murder," wrote Al Purdy on the aesthetics of Canada's national game, hockey. Since the establishment of the National Hockey League in Montréal in 1917, Canada's game has taken on a decidedly American flavour. Only six of the current 26 NHL teams are Canadian: the Montréal Canadiens, the Ottawa Senators, the Toronto Maple Leafs, the Edmonton Oilers, the Calgary Flames and the Vancouver Canucks. The original teams were the Montréal Canadiens, the Montréal Wanderers, the Ottawa Senators and the Toronto Arenas.

The league is expanding. In 1997-98, the NHL season included 26 teams organized into two conferences and four divisions. In the 1998-99 season, Nashville will join the NHL, and the following season Atlanta will become the 28th NHL franchise. By the year 2000, the league will comprise 30 teams with the addition of Columbus and Minnesota.

The crowning glory of the hockey season is the series of play-off games for the Stanley Cup, which are broadcast live across the country. Between championships, the Stanley Cup is kept on public display in Toronto's Hockey Hall of Fame.

## Baseball and Basketball

Baseball in Canada dates to the mid-1800s. In 1854, the Young Canadians of Hamilton became Canada's first organized baseball team. From this Ontario base, the game gradually moved east, west and north, where in 1904, it became so popular in the Yukon Territory that an international championship was established with a team from Alaska representing the United States.

In 1969, the Montréal Expos joined the National League. Eight years later, the Toronto Blue Jays entered the American League and went on to win the World Series in 1992 and 1993. In 1995, professional basketball



Hockey player, Moss Park Arena, Toronto.

Photo by Susan King

established a Canadian presence when the Toronto Raptors and the Vancouver Grizzlies became the 28th and 29th teams in the National Basketball Association.

## THE ATHLETES

In 1996, almost 60 years after the first Canadian women's team was invited to participate in the Olympics, an estimated 23 million people tuned into the summer games to see Canada's female amateur athletes win 11 medals, and Canada's male amateur athletes also win 11 medals.

At the closing ceremonies of the 1996 Paralympics in Atlanta, wheelchair racer Chantal Petitclerc from Montréal carried the Canadian flag. She won five medals in all, two of them gold. Canada's Paralympic team placed seventh overall in a field of 120 national teams, winning 24 gold, 21 silver and 24 bronze medals.

In 1997, Elvis Stojko from Newmarket, Ontario, skated to gold at the World Figure Skating Championships and driver Jacques Villeneuve from St-Jean-sur-Richelieu, Quebec, became the first Canadian to win the World Formula 1 racing championship.

In Nagano, Japan, in 1998, Canada's winter Olympic team won a total of 15 medals (six gold), and placed fifth in a field of 72 participating nations.



## SOURCES

The Canada Council for the Arts  
Canadian Broadcasting Corporation  
Canadian Heritage  
Canadian Radio-television and Telecommunications Commission  
National Film Board of Canada  
National Library of Canada  
Sport Canada  
Statistics Canada  
UNESCO

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Social Trends.** Quarterly. 11-008-XPE
- **Communications.** Quarterly. 56-001-XPB
- **Radio and Television Broadcasting.** Annual. 56-204-XPB
- **Leisure and Personal Services.** Annual. 63-233-XPB
- **Focus on Culture.** Quarterly. 87-004-XPB
- **Canada's Culture, Heritage and Identity: a Statistical Perspective.** Biennial. 87-211-XPB
- **Performing Arts.** 87F0003XPE
- **Survey of Book Publishers and Exclusive Agents, 1994-95.** 87F0004XPE
- **Culture Counts: Cultural Labour Force Survey, Total Population.** 1995. 87F0012XPE
- **As Time Goes by ... Time Use of Canadians.** Occasional. 89-544XPE

Selected publications from other sources

- **Our Creative Diversity—Report of the World Commission on Culture and Development.** UNESCO. 1996.

## Arts and Leisure

### Legend

- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 8.1 Cultural Sector Labour Force, 1991

	Cultural occupations or industries	Cultural occupations in cultural industries	Cultural occupations in other industries
<b>Total</b>	<b>670,290</b>	<b>441,355</b>	<b>228,940</b>
<b>Cultural occupations</b>	<b>348,160</b>	<b>119,225</b>	<b>228,940</b>
Architects	11,815	95	11,715
Painters, sculptors and related artists	11,450	470	10,975
Product and interior designers	29,970	2,140	27,835
Advertising and illustrating artists	28,715	9,165	19,555
Photographers and camera operators	12,330	9,785	2,550
Other occupations in fine and commercial art	1,080	330	745
Producers and directors, performing and audio-visual arts	15,165	13,205	1,960
Conductors, composers and arrangers	1,635	990	645
Musicians and singers	11,650	8,735	2,910
Other occupations related to music and musical entertainment	1,240	500	735
Dancers and choreographers	1,445	910	540
Actors/actresses	4,125	3,680	450
Radio and television announcers	7,825	7,685	135
Other occupations in performing and audio-visual arts	6,990	4,025	2,965
Writers and editors	41,550	22,155	19,395
Translators and interpreters	9,615	410	9,205
Other occupations in writing	300	125	175
Library, museum and archival supervisors	2,030	1,110	920
Librarians, archivists and conservators	20,875	6,400	14,475
Library, museum and archival technicians	3,410	890	2,520
Other occupations in library, museum and archival sciences	2,625	1,085	1,540
Fine arts teachers	26,670	2,120	24,545
Printing forepersons	5,575	905	4,670
Typesetting and composing occupations	8,045	3,050	4,995
Printing press occupations	24,425	3,630	20,795
Printing engraving except photoengraving	3,355	310	3,045
Photoengraving occupations	2,065	470	1,595
Bookbinding occupations	9,130	835	8,295

## 8.1 Cultural Sector Labour Force, 1991 (concluded)

	Cultural occupations or industries	Cultural occupations in cultural industries	Cultural occupations in other industries
Occupations in labouring and other elemental work: printing	4,025	1,280	2,750
Other printing and related occupations	13,950	2,030	11,920
Electronic and related forepersons	1,395	880	505
Radio and TV broadcast equipment operators	5,525	3,715	1,810
Sound and video equipment operators	2,755	1,920	840
Motion picture projectionists	1,025	840	185
Other electronic and related occupations	590	140	445
Other crafts forepersons	1,055	265	795
Photographic processing occupations	12,320	2,790	9,530
Other crafts and equipment operating occupations	425	140	290
<b>Other occupations in cultural industries</b>	<b>322,130</b>	<b>322,130</b>	...
Administrators, managers, supervisors	77,360	77,360	
Professionals and semi-professionals	30,770	30,770	
Skilled and semi-skilled craft and trade workers	44,195	44,195	
Clerical, sales, service and manual work	165,760	165,760	
Not stated	4,050	4,050	

Source: Statistics Canada, Catalogue no. 87-211-XPB.



8.2 Recording Industry<sup>1</sup>

	1989-90	1990-91	1991-92	1992-93	1993-94	1995-96
<b>Reporting companies</b>	<b>187</b>	<b>181</b>	<b>215</b>	<b>187</b>	<b>210</b>	<b>254</b>
Canadian	173	167	201	172	196	239
Atlantic	3	5	6	3	7	11
Quebec	42	47	61	52	76	84
Ontario	104	91	97	81	76	91
Prairies	16	18	29	32	29	28
British Columbia	22	20	22	19	22	40
Yukon Territory and Northwest Territories	—	—	—	—	—	—
Foreign	14	14	14	15	14	15
<b>New releases<sup>2</sup></b>	<b>4,439</b>	<b>4,665</b>	<b>7,490</b>	<b>6,271</b>	<b>6,367</b>	<b>6,655</b>
With Canadian content/by Canadian artists <sup>3</sup>	615	618	1,083	669	719	828
English lyrics	261	340	614	323	376	480
French lyrics	237	196	327	185	190	117
Other <sup>4</sup>	117	82	142	161	153	231
Unspecified	—	—	—	—	—	—
Without Canadian content/non-Canadian artists	3,824	4,047	6,407	5,602	5,648	5,827
English lyrics	2,959	3,442	4,379	3,853	4,199	4,026
French lyrics	98	79	173	161	150	176
Other <sup>4</sup>	767	526	1,487	1,588	1,299	1,625
Unspecified	—	—	368	—	—	—
<b>Musical category</b>						
Adult-oriented popular music	923	740	865	751	798	..
Top 40/rock/disco	1,890	2,334	3,041	2,153	2,403	..
Popular/rock music <sup>5</sup>	..	..	..	..	..	3,288
Classical and related	683	399	1,440	1,405	1,209	1,308
Jazz	244	256	505	352	387	620
Country and folk	257	371	416	591	491	389
Children's	30	70	313	151	196	121
Other <sup>6</sup>	412	495	910	868	883	929
			% of sales			
<b>Canadian content/artists</b>	<b>8.0</b>	<b>10.5</b>	<b>10.0</b>	<b>11.3</b>	<b>12.6</b>	<b>14.5</b>
			\$ millions			
<b>Revenue from the sale of recordings</b>	<b>454.3</b>	<b>508.7</b>	<b>579.7</b>	<b>633.5</b>	<b>738.0</b>	<b>875.1</b>
Singles	9.5	13.1	5.3	5.6	4.8	3.7
Albums	28.9	8.9	5.0	2.1	1.2	1.2
Compact discs	148.7	204.3	325.5	394.2	507.3	706.3
Tapes (analog)	267.2	280.9	243.4	231.4	224.7	x
Other <sup>7</sup>	—	—	—	x	—	x
Unspecified	0.1	1.7	0.5	x	—	—

1. Data for 1994-95 are not available.

2. Excludes singles. A recording released in more than one format (album, tape, CD, etc.) is counted only once.

3. In 1995-96, releases of recordings were reported by whether or not the artist was Canadian, not by the CRTC definition of Canadian content as in previous years, therefore, comparisons between 1995-96 and earlier years should not be made.

4. Includes instrumental music.

5. Popular music and rock were classified as one category in 1995-96.

6. Includes unspecified.

7. Other formats, including multi-media in the 1995-96 survey.

Source: Statistics Canada, Sound Recording Survey.

## 8.3 Private Radio

	1990	1991	1992	1993	1994	1995	1996
<b>Number of employees</b>	<b>10,417</b>	<b>10,213</b>	<b>9,801</b>	<b>9,591</b>	<b>9,251</b>	<b>8,963</b>	<b>8,617</b>
	\$ millions						
<b>Revenues</b>	<b>780</b>	<b>756</b>	<b>768</b>	<b>741</b>	<b>766</b>	<b>780</b>	<b>811</b>
Sales of air time	764	741	749	721	741	754	792
<b>Expenses</b>	<b>811</b>	<b>816</b>	<b>813</b>	<b>785</b>	<b>776</b>	<b>764</b>	<b>791</b>
Salaries and other staff benefits	375	387	391	383	386	379	386
<b>Net profits before taxes</b>	<b>(20)</b>	<b>(34)</b>	<b>(32)</b>	<b>(50)</b>	<b>(28)</b>	<b>4</b>	<b>7</b>

Source: Statistics Canada, Catalogue no. 56-204-XPB.

## 8.4 Radio Listening Time, Fall 1996

	All ages	12-17 years	18 years and over	
			Men	Women
	% of listening time			
<b>All stations</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Adult-contemporary/gold/oldies/rock	38.1	43.3	37.9	37.8
Middle-of-the-road	2.6	1.1	2.1	3.1
Country	14.5	9.6	14.4	15.1
Canadian Broadcasting Corporation	9.5	1.8	9.4	10.4
Album-oriented rock	4.1	6.1	5.1	3.1
Contemporary	6.4	15.8	6.5	5.5
Easy listening	2.2	0.9	1.9	2.6
Talk	13.2	2.6	14.0	13.6
Dance	1.4	7.6	1.1	1.1
U.S. stations	3.3	7.9	3.0	3.1
Other	4.7	3.5	4.7	4.8

Source: Statistics Canada, Catalogue no. 87-211-XPB.

## 8.5 Revenues and Expenses of the Canadian Broadcasting Corporation

	1990	1991	1992	1993	1994	1995	1996
Number of employees <sup>1</sup>	10,733	9,814	9,294	9,208	12,298	11,524	11,367
	\$ millions						
Operating revenues	318.0	321.9	346.3	332.2	350.3	364.8	459.8
Sales of air time	291.0	282.9	308.8	281.9	291.6	284.1	339.7
Operating expenses	1,338.5	1,345.4	1,375.5	1,423.2	1,490.6	1,524.3	1,499.0
Salaries and other staff benefits	683.2	719.8	711.3	713.3	783.2	798.7	693.0
Net cost of CBC operations	988.9	1,007.5	1,004.1	1,069.1	1,121.8	1,112.4	1,233.6

1. From 1994 onwards data include part-time positions.

Source: Statistics Canada, Catalogue no. 56-204-XPB.

## 8.6 Television Viewing Time, Fall 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.			Ont.	Man.	Sask.	Alta.	B.C.
						Total <sup>1</sup>	English <sup>2</sup>	French <sup>2</sup>					
	hours per week												
Total population	22.8	24.0	21.3	24.5	24.2	26.0	22.5	26.6	21.8	22.3	22.5	20.3	21.0
2-11	17.9	21.9	17.1	19.7	20.0	20.1	18.2	20.5	17.6	16.1	17.4	16.5	15.5
12-17	17.3	18.9	18.9	18.1	17.3	18.3	18.3	18.3	17.2	18.0	16.4	16.0	16.0
Men													
18 years and over	21.9	21.8	20.3	23.5	22.6	24.6	21.6	25.2	21.0	21.7	21.3	19.6	21.1
18-24	14.4	15.2	10.7	18.7	15.2	15.6	15.5	15.5	14.1	11.3	14.5	13.2	13.9
25-34	18.8	21.2	21.9	21.7	20.4	20.7	19.0	21.0	18.1	19.8	18.6	16.7	17.2
35-49	19.9	20.8	18.0	21.2	21.0	22.8	18.7	23.6	18.7	20.3	17.7	17.7	18.9
50-59	23.8	24.8	23.8	26.3	22.9	27.1	21.1	28.3	22.1	23.9	21.8	21.4	22.9
60 and over	32.5	27.4	26.3	30.3	32.0	36.2	31.7	37.9	31.4	30.9	31.7	31.0	31.9
Women													
18 and over	26.5	28.0	24.4	28.3	28.5	30.7	25.4	31.7	25.0	26.2	27.3	23.7	23.7
18-24	18.6	23.8	18.5	21.8	21.8	18.8	15.7	19.6	18.7	19.7	22.3	16.6	16.3
25-34	23.4	30.1	23.6	27.1	28.0	26.4	22.9	27.2	22.2	24.7	22.6	21.1	19.8
35-49	23.0	25.1	22.6	25.4	27.8	27.1	21.3	28.2	21.3	22.0	22.6	20.4	20.1
50-59	28.9	30.7	23.1	29.1	30.8	34.1	29.1	35.4	27.1	26.7	27.8	25.6	25.2
60 and over	36.5	31.8	30.4	35.2	31.7	42.5	33.8	44.9	34.5	34.6	37.4	35.0	34.5

1. Includes respondents who did not indicate a language spoken at home or who indicated a language other than English or French.

2. Language spoken at home.

Source: Statistics Canada, Catalogue no. 87-211-XPB.

8.7 Film and Video Distribution and Wholesaling<sup>1</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95
<b>Film and video distribution only</b>	<b>108</b>	<b>117</b>	<b>115</b>	<b>120</b>	<b>135</b>
Canadian control	90	100	99	104	116
Foreign control	18	17	16	16	19
<b>Employment</b>	<b>2,023</b>	<b>1,973</b>	<b>1,862</b>	<b>1,923</b>	<b>2,227</b>
Full-time	1,751	1,689	1,663	1,682	1,986
Part-time	269	280	195	238	236
Working proprietors	3	4	4	3	5
\$ millions					
<b>Primary market</b>					
Revenues	<b>1,183.8</b>	<b>1,230.7</b>	<b>1,229.1</b>	<b>1,336.1</b>	<b>1,503.5</b>
Distribution	655.5	643.3	650.0	784.0	754.0
Theatrical	193.4	184.6	170.8	196.4	239.0
Home entertainment	437.8	435.9	443.7	551.9	494.7
Pay TV	33.5	34.3	35.1	54.8	56.4
Conventional TV	329.5	308.9	275.9	375.5	305.4
Home video	74.9	92.7	132.8	121.5	132.9
Non-theatrical	24.3	22.7	21.9	22.2	20.3
Unspecified	—	—	13.6	13.6	—
Wholesaling videocassettes	495.4	547.3	542.7	514.1	717.0
Other revenue	32.9	40.1	36.4	38.0	32.4
<b>Expenses</b>	<b>1,065.1</b>	<b>1,084.3</b>	<b>1,091.4</b>	<b>1,126.4</b>	<b>1,297.8</b>
Salaries and benefits	60.9	64.7	64.4	65.6	67.2
Licensing costs (rights, royalties and other fees)	401.0	350.0	284.1	337.3	421.3
Depreciation and amortization	8.8	17.4	13.5	13.9	18.7
Interest expenses	5.5	6.0	9.5	5.7	9.7
Other costs	589.0	646.2	720.3	703.8	780.9
% of total revenue					
<b>Profit margin<sup>2</sup></b>	<b>10.0</b>	<b>11.9</b>	<b>11.2</b>	<b>15.7</b>	<b>13.7</b>

1. From April 1 to March 31.

2. Profit margin is defined as total revenue less total expenses (profit or loss) shown as % of total revenues.

Source: Statistics Canada, Culture, Tourism and Centre for Education Statistics Division.



8.8 Film Laboratories and Post-Production<sup>1</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
<b>Number of firms</b>	<b>173</b>	<b>162</b>	<b>161</b>	<b>164</b>	<b>154</b>	<b>226</b>
Quebec	41	50	53	55	46	55
Ontario	107	89	85	84	85	123
Other provinces and territories	25	23	23	25	23	48
<b>Employment</b>	<b>2,719</b>	<b>3,173</b>	<b>3,095</b>	<b>3,127</b>	<b>3,018</b>	<b>4,977</b>
Full-time	1,908	2,063	1,912	2,042	2,252	2,799
Part-time	272	341	363	271	220	578
Freelancers	520	753	802	795	527	1,565
Working proprietors	19	16	18	19	19	35
\$ millions						
<b>Salaries and wages</b>	<b>75.8</b>	<b>81.6</b>	<b>82.2</b>	<b>82.6</b>	<b>97.7</b>	<b>119.5</b>
Salaries and wages	66.3	70.3	70.9	70.4	83.5	95.4
Benefits	6.0	7.1	7.4	7.3	7.6	10.8
Freelancers' fees	3.5	4.3	3.9	5.0	6.6	13.3
<b>Operating revenues</b>	<b>264.6</b>	<b>286.9</b>	<b>309.8</b>	<b>323.7</b>	<b>399.5</b>	<b>483.8</b>
Quebec	77.3	87.6	96.4	89.9	123.6	144.8
Ontario	170.5	184.9	197.5	212.1	248.4	299.3
Other provinces and territories	16.8	14.4	15.9	21.7	27.4	39.8
<b>Operating expenses</b>	<b>237.7</b>	<b>266.3</b>	<b>294.8</b>	<b>299.5</b>	<b>342.3</b>	<b>403.0</b>
Quebec	70.1	86.8	93.1	83.2	116.3	123.6
Ontario	153.0	165.3	186.4	195.4	203.0	249.4
Other provinces and territories	14.7	14.2	15.3	20.8	23.1	30.0
% of operating revenue						
<b>Operating margin</b>	<b>10.2</b>	<b>7.2</b>	<b>4.8</b>	<b>7.5</b>	<b>14.3</b>	<b>16.7</b>
Quebec	9.4	0.9	3.5	7.4	6.0	14.6
Ontario	10.3	10.6	5.6	7.9	18.3	16.6
Other provinces and territories	12.7	1.1	3.5	4.0	15.9	24.7

1. From April 1 to March 31.

Source: Statistics Canada, Culture, Tourism and Centre for Education Statistics Division.

## 8.9 Motion Picture Theatres and Drive-Ins

	1991-92	1992-93	1993-94	1994-95	1995-96
<b>Number of theatres</b>	<b>723</b>	<b>686</b>	<b>664</b>	<b>659</b>	<b>667</b>
Regular theatres	620	598	581	582	590
Drive-ins	103	88	83	77	77
<b>Paid admissions (thousands)</b>	<b>71,621</b>	<b>73,727</b>	<b>78,812</b>	<b>83,766</b>	<b>87,454</b>
Regular theatres	69,195	71,678	76,510	81,090	84,997
Drive-ins	2,426	2,049	2,302	2,676	2,457
<b>Average ticket price (\$)</b>	<b>5.65</b>	<b>5.36</b>	<b>5.32</b>	<b>5.30</b>	<b>4.99</b>
Regular theatres	5.64	5.35	5.30	5.29	4.97
Drive-ins	5.79	5.62	5.85	5.69	5.68
<b>Number of screens</b>	<b>1,754</b>	<b>1,742</b>	<b>1,727</b>	<b>1,808</b>	<b>1,902</b>
Regular theatres	1,611	1,613	1,601	1,682	1,779
Drive-ins	143	129	126	126	123
<b>Number of seats/cars</b>					
Regular theatres	482,052	471,582	461,110	470,568	483,816
Drive-ins	56,887	51,760	52,115	54,151	54,597
\$ thousands					
<b>Revenue - theatres</b>	<b>491,779</b>	<b>494,430</b>	<b>532,776</b>	<b>568,217</b>	<b>566,746</b>
Admission receipts	367,334	364,966	387,857	409,540	404,881
Concessions and other	124,445	129,464	144,919	158,678	161,864
<b>Revenue - drive-ins</b>	<b>19,066</b>	<b>15,419</b>	<b>17,893</b>	<b>19,947</b>	<b>18,784</b>
Admission receipts	13,078	10,768	12,627	14,362	13,181
Concessions and other	5,988	4,652	5,265	5,585	5,603
<b>Expenses</b>	<b>450,657</b>	<b>445,686</b>	<b>491,745</b>	<b>523,608</b>	<b>523,363</b>
Regular theatres	433,657	431,500	475,610	505,569	506,873
Drive-ins	16,999	14,186	16,134	18,038	16,491
number					
<b>Employment - theatres</b>					
Full-time	1,304	1,014	1,305	1,155	1,005
Part-time	7,794	7,700	8,323	7,722	8,155
Working proprietors and family workers	159	177	159	147	172
<b>Employment - drive-ins</b>					
Full-time	177	122	133	173	130
Part-time	760	659	762	784	812
Working proprietors and family workers	61	49	52	34	49
%					
<b>Profit margin</b>	<b>11.8</b>	<b>12.6</b>	<b>10.7</b>	<b>11.0</b>	<b>10.6</b>
Regular theatres	11.8	12.7	10.7	11.0	10.6
Drive-ins	10.8	8.0	9.8	9.6	12.2

Source: Statistics Canada, Catalogue no. 87F0009-XPE.

## 8.10 Performing Arts

	Theatre		Dance		Opera		Music	
	1993-94	1994-95	1993-94	1994-95	1993-94	1994-95	1993-94	1994-95
Number of companies	285	293	65	71	13	18	108	111
Total performances	31,081	30,235	2,079	2,157	697	905	4,121	4,034
thousands								
Total attendance	8,207	8,469	1,231	1,115	638	751	3,188	3,217
\$ millions								
Total revenue	180.9	183.4	52.5	55.9	38.1	40.5	111.7	114.3
Earned revenues	95.7	97.5	20.6	22.8	17.8	18.7	46.3	47.9
Public grants	59.2	61.2	22.8	21.9	11.5	12.2	42.0	42.0
Private sector donations	26.0	24.7	9.1	11.3	8.9	9.6	23.5	24.3
Total expenditures	182.3	183.8	51.4	55.4	39.4	40.3	111.3	115.4
Personnel	103.4	102.9	266.6	27.3	21.3	23.8	74.7	75.9
Production	28.8	28.9	11.4	13.0	8.3	6.9	9.6	12.3
Marketing and other	50.1	52.1	13.4	51.0	9.8	9.6	29.0	27.2
Surplus (deficit)	1.4	0.4	1.2	0.5	1.3	0.1	1.5	1.1
number								
Employment/Voluntarism								
Paid positions	15,908	15,624	6,254	2,990	3,783	4,640	10,761	10,919
Volunteers	12,003	12,451	1,687	3,295	1,967	1,126	7,349	9,702

Source: Statistics Canada, Catalogue no. 87-211-XPB.

8.11 Book Sales<sup>1</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95
	\$ thousands				
<b>Total sales by English-language firms<sup>2</sup></b>	<b>995,193</b>	<b>981,261</b>	<b>979,780</b>	<b>978,016</b>	<b>1,093,832</b>
Wholesale	115,016	89,206	85,291	100,082	111,074
Retail	336,263	360,724	371,732	386,515	481,959
Accredited bookstores	1,978	2,236	3,702	2,487	7,906
Other independent bookstores	68,280	76,844	71,104	79,294	98,310
Campus bookstores	80,343	98,126	105,730	96,181	138,959
Chain bookstores	108,564	102,202	113,525	129,725	171,323
Department stores	13,514	14,815	14,135	14,779	13,128
Mail order houses	1,686	2,756	1,266	1,524	992
Other retail stores and unallocated	61,898	63,745	62,269	62,524	51,307
Institutions	244,042	250,194	241,302	233,373	226,407
Government and special libraries	17,422	22,213	24,566	25,242	24,870
Public libraries	13,907	15,569	14,410	12,812	17,546
Elementary and secondary institutions	140,377	135,555	133,132	122,706	126,099
Postsecondary institutions	63,855	64,080	59,222	62,742	49,101
Other institutions and unallocated	8,482	12,776	9,972	9,871	8,791
Others	299,872	281,137	281,455	258,046	274,392
Direct to general public	180,863	135,585	138,118	119,087	124,745
Book clubs and unallocated	119,009	145,552	143,337	138,960	149,647
<b>Total sales by French-language firms</b>	<b>256,950</b>	<b>264,121</b>	<b>277,572</b>	<b>287,620</b>	<b>306,475</b>
Wholesale	37,599	47,346	47,032	45,491	51,936
Retail	149,871	147,282	158,773	172,398	184,045
Accredited bookstores	66,084	74,230	75,915	100,133	114,943
Other independent bookstores	14,358	19,908	22,514	14,258	10,192
Campus bookstores	14,823	15,197	16,063	14,187	16,915
Chain bookstores	34,619	9,292	13,512	11,060	6,852
Department stores	13,023	20,978	22,671	26,396	31,161
Mail-order houses	3,587	745	852	859	1,011
Other retail stores and unallocated	3,377	6,931	7,246	5,506	3,184
Institutions	48,637	50,089	52,248	50,145	56,107
Government and special libraries	907	1,103	388	486	327
Public libraries	706	9,136	742	469	1,294
Elementary and secondary institutions	42,569	33,461	46,676	38,968	48,579
Postsecondary institutions	3,219	4,601	3,236	7,953	6,432
Other institutions and unallocated	1,235	1,789	1,207	2,373	1,504
Others	20,844	19,404	19,519	19,586	12,458
Direct to general public	16,823	17,140	16,120	16,505	15,800
Book clubs and unallocated	4,021	2,264	3,398	3,081	2,558

1. Book sales refer to the sales of all titles produced for sale through any of the print, micro format, computer software or audiovisual formats.

2. Includes firms for "other languages."

Source: Statistics Canada, Survey of Book Publishers and Exclusive Agents.



8.12 Book Publishing and Exclusive Agents, English<sup>1</sup>

	1990-91	1991-92	1992-93	1993-94	1994-95
<b>Firms</b>			number		
Publishers	210	207	201	197	207
Exclusive agents	30	30	27	26	26
<b>Titles published<sup>2</sup></b>	<b>5,900</b>	<b>6,899</b>	<b>6,688</b>	<b>7,516</b>	<b>8,012</b>
Textbooks	1,266	1,146	947	1,243	1,350
Tradebooks	3,342	3,560	3,661	4,121	4,342
Other	1,292	2,193	2,080	2,152	2,320
<b>Titles reprinted<sup>2</sup></b>	<b>3,545</b>	<b>3,198</b>	<b>3,532</b>	<b>3,762</b>	<b>3,754</b>
Textbooks	1,747	1,488	1,590	1,743	1,906
Tradebooks	1,174	1,213	1,450	1,610	1,497
Other	624	497	492	409	351
<b>Total in print<sup>2</sup></b>	<b>39,766</b>	<b>41,421</b>	<b>41,852</b>	<b>46,014</b>	<b>47,353</b>
Textbooks	11,615	13,136	12,983	13,570	13,319
Tradebooks	19,521	20,689	21,732	24,623	26,418
Other	8,630	7,596	7,137	7,821	7,616
			\$ thousands		
<b>Sales in Canada</b>	<b>995,193</b>	<b>981,261</b>	<b>979,780</b>	<b>978,016</b>	<b>1,093,832</b>
<b>Own titles<sup>2</sup></b>	<b>466,420</b>	<b>437,655</b>	<b>439,158</b>	<b>443,751</b>	<b>491,026</b>
Textbooks	163,103	156,894	154,523	134,618	152,337
Tradebooks	105,431	99,752	103,053	113,307	132,857
Other	197,886	181,009	181,581	195,826	205,833
<b>Exclusive agency</b>	<b>528,773</b>	<b>543,606</b>	<b>540,622</b>	<b>534,265</b>	<b>602,807</b>
Textbooks	156,024	165,894	152,475	158,999	170,766
Tradebooks	287,288	293,202	331,606	316,173	375,351
Other	85,461	84,510	56,541	59,093	56,690
<b>Exports</b>	<b>33,178</b>	<b>28,270</b>	<b>41,958</b>	<b>94,018</b>	<b>112,297</b>
<b>Other foreign sales</b>	<b>178,391</b>	<b>177,663</b>	<b>202,494</b>	<b>228,284</b>	<b>246,282</b>

**8.12 Book Publishing and Exclusive Agents, English<sup>1</sup> (concluded)**

	1990-91	1991-92	1992-93	1993-94	1994-95
	number				
<b>Personnel</b>					
Full-time employees	5,962	5,681	5,487	5,366	5,304
Part-time employees	—	—	—	—	809
	\$ thousands				
<b>Total personnel expenses<sup>3</sup></b>	<b>204,698</b>	<b>216,592</b>	<b>216,544</b>	<b>214,913</b>	<b>227,531</b>
<b>Total revenues</b>	<b>1,238,174</b>	<b>1,224,841</b>	<b>1,273,486</b>	<b>1,349,090</b>	<b>1,509,025</b>
<b>Total expenses</b>	<b>1,160,788</b>	<b>1,184,297</b>	<b>1,219,960</b>	<b>1,277,408</b>	<b>1,412,482</b>
<b>Before tax profit margin</b>	<b>77,386</b>	<b>40,544</b>	<b>53,526</b>	<b>71,682</b>	<b>96,543</b>
As a percentage of revenues	6.3	3.3	4.2	5.3	6.4
% of firms with a profit	57.5	56.1	54.8	60.1	68.2

1. Includes firms for "other languages."

2. Includes the activities of publishers only.

3. Includes salaries of full- and part-time staff as well as outside fees.

Source: Statistics Canada, Culture, Tourism and the Centre for Education Statistics.

**8.13 Book Publishing and Exclusive Agents, French<sup>1</sup>**

	1990-91	1991-92	1992-93	1993-94	1994-95
	number				
<b>Firms</b>					
Publishers	113	115	122	119	119
Exclusive agents	18	17	14	13	14
<b>Titles published<sup>2</sup></b>	<b>2,391</b>	<b>2,604</b>	<b>3,155</b>	<b>3,039</b>	<b>3,084</b>
Textbooks	804	821	946	1,031	1,106
Tradebooks	1,247	1,427	1,896	1,659	1,705
Other	340	356	313	349	273
<b>Titles reprinted<sup>2</sup></b>	<b>2,913</b>	<b>2,867</b>	<b>3,249</b>	<b>3,312</b>	<b>3,723</b>
Textbooks	2,025	1,868	1,926	1,893	2,118
Tradebooks	736	847	1,185	1,290	1,395
Other	152	152	138	129	210
<b>Total in print<sup>2</sup></b>	<b>20,896</b>	<b>23,494</b>	<b>24,653</b>	<b>28,540</b>	<b>30,417</b>
Textbooks	8,049	9,094	9,346	10,293	11,643
Tradebooks	10,357	11,924	12,702	15,255	16,131
Other	2,490	2,476	2,605	2,992	2,643

**8.13 Book Publishing and Exclusive Agents, French<sup>1</sup> (concluded)**

	1990-91	1991-92	1992-93	1993-94	1994-95
	\$ thousands				
<b>Sales in Canada</b>	<b>256,950</b>	<b>264,121</b>	<b>277,572</b>	<b>287,620</b>	<b>306,475</b>
Own titles <sup>2</sup>	133,392	144,072	159,192	162,252	164,897
Textbooks	83,302	84,814	94,923	94,198	103,826
Tradebooks	34,991	42,862	47,400	49,757	48,027
Other	15,099	16,395	16,870	18,298	13,045
<b>Exclusive agency</b>	<b>123,558</b>	<b>120,049</b>	<b>118,380</b>	<b>125,368</b>	<b>141,579</b>
Textbooks	8,263	6,542	6,579	5,341	5,991
Tradebooks	94,608	91,878	90,938	95,849	108,777
Other	20,688	21,628	20,863	24,178	26,811
<b>Exports and other foreign sales</b>	<b>7,350</b>	<b>20,222</b>	<b>29,764</b>	<b>21,677</b>	<b>12,373</b>
	number				
<b>Personnel</b>					
Full-time employees	1,378	1,444	1,498	1,493	1,504
Part-time employees	—	—	—	—	251
	\$ thousands				
<b>Total personnel expenses<sup>3</sup></b>	<b>49,158</b>	<b>53,296</b>	<b>64,143</b>	<b>64,789</b>	<b>64,788</b>
<b>Total revenues</b>	<b>282,871</b>	<b>300,318</b>	<b>326,186</b>	<b>328,862</b>	<b>342,817</b>
<b>Total expenses</b>	<b>265,604</b>	<b>285,489</b>	<b>314,426</b>	<b>310,984</b>	<b>316,113</b>
<b>Before tax profit margin</b>	<b>17,267</b>	<b>14,829</b>	<b>11,760</b>	<b>17,878</b>	<b>26,704</b>
As a percentage of revenues	6.1	4.9	3.6	5.4	7.8
% of firms with a profit	64.1	68.2	64.0	72.7	76.7

1. Includes firms for "other languages."

2. Includes the activities of publishers only.

3. Includes salaries of full- and part-time staff as well as outside fees.

Source: Statistics Canada, Culture, Tourism and Centre for Education Statistics Division.

**8.14 Periodicals**

	1990-91	1991-92	1992-93	1993-94	1994-95
	number				
<b>Number of reporting publishers</b>	<b>1,099</b>	<b>1,055</b>	<b>1,047</b>	<b>1,000</b>	<b>1,083</b>
Publishers of one periodical	959	915	907	866	927
Publishers of more than one periodical	140	140	140	134	156
<b>Number of reported periodicals</b>	<b>1,501</b>	<b>1,440</b>	<b>1,400</b>	<b>1,331</b>	<b>1,404</b>

**8.14 Periodicals (concluded)**

	1990-91	1991-92	1992-93	1993-94	1994-95
<b>Employment</b>					
Full-time	4,651	4,583	4,332	4,106	4,498
Part-time	1,726	1,690	1,545	1,472	1,581
Volunteers	3,993	4,046	4,112	3,900	3,727
<b>Total circulation per issue</b>	<b>39,457</b>	<b>39,050</b>	<b>37,108</b>	<b>36,396</b>	<b>38,816</b>
General consumer periodical	17,551	14,635	13,211	12,632	12,796
Special interest consumer periodical	10,265	12,498	12,907	13,856	15,530
Business or trade periodical	5,937	5,998	5,673	4,899	5,569
Farm periodical	1,241	1,173	1,080	967	1,054
Religious periodical	3,615	3,951	3,597	3,433	3,240
Scholarly periodical	848	795	640	609	627
<b>Origin of editorial content and artwork of a typical issue</b>			%		
<b>Text</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
In-house	50.4	49.3	49.4	48.3	49.0
Outside the organization					
Canadian-authored	42.0	43.0	42.6	43.9	43.1
Foreign-authored	7.6	7.7	8.0	7.8	7.9
<b>Illustrations and photography</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
In-house	44.1	42.2	42.9	40.7	43.6
Outside the organization					
Canadian-authored	49.3	50.5	50.2	52.4	50.2
Foreign-authored	6.6	7.2	6.9	6.9	6.2
			\$ thousands		
<b>Revenues</b>	<b>866,032</b>	<b>838,374</b>	<b>852,041</b>	<b>795,419</b>	<b>866,860</b>
Advertising sales	565,347	536,071	528,954	485,250	521,813
Single-copy sales	61,626	58,880	57,190	55,639	72,536
Subscription sales	181,040	184,508	204,214	199,385	214,538
Back issues	2,538	1,875	2,420	2,083	2,338
Other revenues <sup>1</sup>	55,481	57,039	59,262	53,060	55,635
<b>Expenses</b>	<b>847,645</b>	<b>819,108</b>	<b>806,098</b>	<b>750,237</b>	<b>800,031</b>
Salaries, wages, fees	187,206	185,231	189,069	181,558	194,065
Non-salaried costs	660,166	630,224	610,029	568,617	605,966
Unspecified	273	3,653	7,000	63	
<b>Profit before taxes</b>	<b>18,267</b>	<b>19,266</b>	<b>45,896</b>	<b>45,181</b>	<b>66,829</b>
			%		
<b>Profit before taxes as % of total revenue</b>	<b>2.1</b>	<b>2.3</b>	<b>5.4</b>	<b>5.7</b>	<b>7.7</b>

1. "Other revenues" include list sales, grants, transfers, donations, membership fees and unspecified.

Source: Statistics Canada, Culture, Tourism and Centre for Education Statistics Division.



## 8.15 Reading Habits, 1992

	Sex			Education						Age				
	Total	Male	Female	Master's/ doctorate medical/ dental	B.A.	Diploma	Post- secondary/ some post- secondary	Elementary/ secondary	Not stated	Under 20	20-34	35-44	45-59	60 and over
%														
<b>Percentage of Canadians who read:</b>														
<b>A newspaper</b>														
In the last week	82.8	83.9	81.7	94.5	90.4	88.9	85.4	78.3	47.7	73.7	80.9	83.8	87.4	83.8
In the last 12 months	92.1	92.3	91.9	98.1	97.5	96.3	95.3	89.6	50.8	89.4	92.7	93.3	93.1	90.1
<b>A magazine</b>														
In the last week	61.8	58.6	64.8	86.0	77.5	68.5	67.1	52.8	29.9	62.6	61.1	64.0	62.9	59.0
In the last 12 months	79.7	76.0	83.4	94.2	92.7	86.6	85.8	72.4	34.7	86.8	82.0	81.5	78.0	72.9
<b>A book</b>														
In the last week	43.9	34.5	53.0	64.6	59.1	47.2	48.5	36.7	19.3	47.1	41.6	46.7	43.2	44.2
In the last 12 months	66.0	56.8	74.8	90.7	81.9	72.3	73.5	56.5	27.9	72.0	66.8	69.6	63.9	60.3
Type of last book read	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Fiction	34.9	25.1	44.2	38.3	39.8	39.0	39.8	30.9	13.2	48.1	36.8	36.2	29.2	30.3
Non-fiction	30.4	31.1	29.8	52.1	41.4	32.9	33.3	24.9	12.1	22.6	29.4	32.9	34.2	29.1
Not stated or not applicable	34.7	43.9	25.9	9.5	18.7	28.1	26.9	44.2	74.6	29.3	33.8	30.9	36.6	40.6
Type of fiction or non-fiction:	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Novel	32.5	22.6	42.1	35.4	37.0	36.7	37.2	28.7	12.3	43.3	34.3	34.0	27.1	29.0
Biography/autobiography	8.9	8.0	9.7	13.0	10.4	9.6	9.0	8.2	1.3	7.9	7.3	8.3	11.5	9.8
History	5.4	6.7	4.1	9.7	5.7	5.0	6.5	4.8	4.2	5.4	4.4	5.3	5.2	7.1
Self-help	7.4	7.5	7.4	7.2	14.6	8.6	8.6	4.9	2.6	3.9	9.0	9.4	7.8	3.9
Other non-fiction	8.7	8.8	8.6	21.5	10.6	9.6	9.1	6.9	4.0	5.3	8.7	9.9	9.4	8.2
Not stated or not applicable	37.1	46.4	28.2	10.2	21.5	30.4	29.7	46.4	74.6	34.2	36.4	33.1	39.0	41.9

Source: Statistics Canada, Catalogue no. 87-211-XPB.

8.16 Heritage Institutions<sup>1</sup>

	1989-90	1990-91	1991-92	1992-93	1993-94	1995-96
<b>All heritage institutions (excluding nature parks)</b>						
Institutions	2,125	2,116	2,098	2,120	2,122	2,390
Employment <sup>2</sup>	23,474	23,827	23,969	24,229	24,127	23,173
Attendance (thousands)	57,202	57,120	54,464	54,328	54,929	54,482
Revenues <sup>3</sup> (\$ thousands)	940,924	959,218	1,014,671	991,264	986,056	1,095,103
Expenditures <sup>3</sup> (\$ thousands)	907,194	953,788	1,004,405	970,408	969,338	1,103,446
<b>All types of museums</b>						
Institutions	1,233	1,228	1,219	1,230	1,236	1,394
Employment <sup>2</sup>	11,285	11,489	11,685	12,073	11,892	11,594
Attendance (thousands)	24,305	24,792	23,319	24,883	25,445	26,882
Revenues <sup>3</sup> (\$ thousands)	558,938	554,123	582,618	576,840	586,767	641,855
Expenditures <sup>3</sup> (\$ thousands)	542,632	556,182	589,914	567,143	588,587	646,119
<b>Community museums</b>						
Institutions	702	695	693	700	710	745
Employment <sup>2</sup>	2,418	2,368	2,470	2,588	2,609	2,267
Attendance (thousands)	3,294	3,194	3,187	3,285	3,353	3,608
Revenues <sup>3</sup> (\$ thousands)	46,582	41,080	51,231	51,149	53,628	50,885
Expenditures <sup>3</sup> (\$ thousands)	47,601	40,839	52,677	52,530	51,986	49,959
<b>Art museums</b>						
Institutions	185	184	185	183	178	186
Employment <sup>2</sup>	2,860	2,937	2,902	2,952	2,913	2,464
Attendance (thousands)	5,511	5,891	5,557	5,378	5,589	5,764
Revenues <sup>3</sup> (\$ thousands)	179,044	204,934	190,726	191,963	180,201	190,335
Expenditures <sup>3</sup> (\$ thousands)	177,850	206,914	215,984	196,200	178,055	195,384
<b>History museums</b>						
Institutions	256	257	251	253	254	290
Employment <sup>2</sup>	2,869	2,973	2,915	3,176	3,132	3,378
Attendance (thousands)	7,267	7,959	7,390	8,958	8,760	9,887
Revenues <sup>3</sup> (\$ thousands)	156,307	138,216	148,365	154,002	170,688	209,193
Expenditures <sup>3</sup> (\$ thousands)	147,693	130,730	147,374	150,722	176,091	204,449
<b>Other museums</b>						
Institutions	90	92	90	94	94	173
Employment <sup>2</sup>	3,138	3,211	3,398	3,357	3,238	3,485
Attendance (thousands)	8,233	7,748	7,185	7,262	7,742	7,623
Revenues <sup>3</sup> (\$ thousands)	177,004	169,894	192,296	179,726	182,250	191,442
Expenditures <sup>3</sup> (\$ thousands)	169,487	177,699	173,878	167,692	182,455	196,326
<b>Historic sites</b>						
Institutions	368	372	369	375	384	443
Employment <sup>2</sup>	6,314	6,329	6,105	6,010	6,057	5,662
Attendance (thousands)	16,977	16,940	16,784	16,725	17,020	16,535
Revenues <sup>3</sup> (\$ thousands)	147,093	165,742	174,217	162,409	151,478	163,237
Expenditures <sup>3</sup> (\$ thousands)	139,221	158,581	166,162	153,993	142,698	159,881

**8.16 Heritage Institutions (concluded)**

	1989-90	1990-91	1991-92	1992-93	1993-94	1995-96
<b>Archives</b>						
Institutions	355	353	345	343	337	356
Employment <sup>2</sup>	2,703	2,644	2,685	2,571	2,615	2,232
Attendance (thousands)	834	722	649	905	933	641
Revenues <sup>3</sup> (\$ thousands)	115,117	125,338	126,703	126,086	120,364	120,709
Expenditures <sup>3</sup> (\$ thousands)	113,800	124,258	125,639	128,884	119,337	132,140
<b>Other types of institutions</b>						
Institutions	169	163	165	172	165	197
Employment <sup>2</sup>	3,172	3,365	3,494	3,575	3,563	3,685
Attendance (thousands)	15,086	14,666	13,712	11,815	11,531	10,424
Revenues <sup>3</sup> (\$ thousands)	101,862	107,391	115,268	117,253	116,612	136,802
Expenditures <sup>3</sup> (\$ thousands)	111,541	114,768	122,689	120,387	118,715	165,306
<b>Nature parks</b>						
Institutions	171	169	170	168	169	172
Employment <sup>2</sup>	8,445	8,057	7,997	8,156	9,707	8,469
Attendance (thousands)	56,835	54,374	54,372	53,866	56,307	58,483
Revenues <sup>3</sup> (\$ thousands)	316,247	314,084	310,443	311,121	312,911	343,907
Expenditures <sup>3</sup> (\$ thousands)	268,468	267,135	258,392	260,166	262,910	336,166

1. Data for 1994-95 are not available.

2. Full-time and part-time.

3. Includes operating and capital expenditures and/or revenues.

Source: Statistics Canada, Catalogue no. 87F0002-XPE.

8.17 Participation in Physical Activities,<sup>1</sup> 1994–95

	Total	Males	Females
		thousands	
<b>Total Population</b>	<b>23,949</b>	<b>11,780</b>	<b>12,168</b>
In the past three months		% participation <sup>2</sup>	
Walk for exercise	61.1	52.2	69.7
Swim	23.0	22.7	23.3
Bicycle	25.2	28.4	22.1
Home exercise	25.6	21.5	29.6
Ice hockey	4.8	8.9	0.9
Skating	8.4	9.9	7.0
Downhill skiing	4.4	5.2	3.7
Jogging or running	13.6	17.2	10.1
Golfing	9.7	14.6	4.9
Exercise class or aerobics	7.5	4.3	10.7
Cross-country skiing	2.9	3.0	2.8
Bowling	10.3	11.1	9.5
Baseball or softball	10.1	14.0	6.3
Tennis	5.2	7.1	3.3
Weight training	11.2	15.1	7.5
Fishing	10.7	15.5	6.0
Volleyball	7.5	8.3	6.6
Yoga or Tai-Chi	1.6	1.3	1.9
Other activity	12.5	17.6	7.7
No activity	8.4	8.0	8.7

1. Data come from a survey held June 1994 to May 1995 and included respondents 12 years of age and older.

2. Respondents could participate in more than one activity. Participation rates are by activity.

Source: Statistics Canada, National Population Health Survey, 1994–95.





SECTION

# 3

## **The Economy**

*The Economy*

*Primary Industries*

*Manufacturing and Construction*

*Communications, Transport  
and Trade*

*Finance and Services*



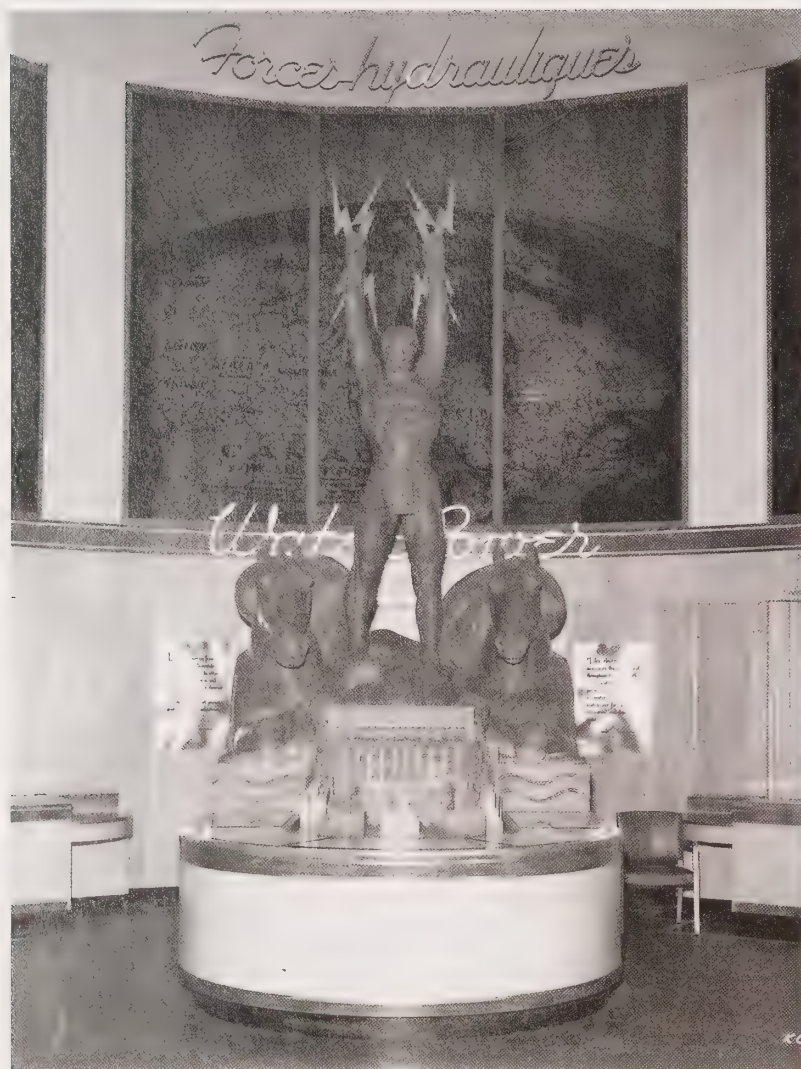


## *The Economy*

### **C h a p t e r**

*In 1898, Sir Wilfrid Laurier looked to the future and boldly predicted that “the 20th century will belong to Canada.” He had every reason for such unbridled optimism. For Canada, the key pieces were now in place. The national dream of a Pacific railway had become a reality. The vast prairies had been surveyed and were ready for settlement. Soon, with the lure of free Crown land, the trickle of immigration would grow into a torrent and*





Work by Jacobine Jones, National Archives of Canada, PA-108430

"Water-Power," a Canadian exhibit at the 1939 New York World's Fair.

the wheat boom would launch Canada on the road to greatness.

Wheat was king in the early days of "Canada's century." It was certainly the stuff of dreams for millions of settlers who would break prairie sod before the First World War and for eastern manufacturers who catered to their needs. Sheltered behind high tariff walls, a strong and growing manufacturing sector shipped farm supplies to the prairies, machinery and equipment to the mines and mills elsewhere in the hinterland, and later, consumer goods (as incomes rose) to the cities and countryside. To a large extent, this was the reality of the economy of Canada at the turn of the century, a reality that shaped the lives and livelihoods of Canadians until the 1970s.

In fact, Canada's economy worked well when the British, Americans and Europeans were buying all the farm and forest products, metals and minerals we could produce. The 1920s roared for good reason in Canada: we were getting rich. But when demand dried up for our iron, wood and paper, mines and mills across the country closed their doors. The effects would percolate through the manufacturing and service sectors and the Great Depression would put a million people out of work.

It took the horror of the Second World War to deliver Canada from the Great Depression, but post-war reconstruction put the old model back on track and ushered in a golden age for Canada. Throughout the 1950s and 1960s, employment was high, inflation low, and steady growth in personal incomes financed an expanding social safety net, including the Canada Pension Plan, generous unemployment insurance, inexpensive post-secondary education and universal health care.

The 1970s were difficult years for Canada. The Organization of Petroleum Exporting Countries' oil-price shock rippled through the industrial world and for the first time, consumer prices and unemployment levels rose in lock step and growth in real income ground to a halt. Stagflation, as the new phenomenon was dubbed, seemed to resist all traditional economic medicines. Eventually, the central banks, led by the U.S. Federal

Reserve, identified inflation as the worse of two evils and raised interest rates to unprecedented levels. The policy stemmed the tide of rising prices, but pushed many Western economies into the steepest recession since the 1930s. In 1983, more than 1.5 million Canadians were out of work. The national unemployment rate soared to 11.9% and didn't dip below 8.0% until 1998.

Over the course of the 1970s and 1980s, the century-old Canadian economy found itself increasingly involved in a move to liberalize its trade barriers. In fact, the old economic order was officially laid to rest with the stroke of a pen, when Canada and the United States signed the Free Trade Agreement (FTA) in 1988. It was the culmination of an ongoing movement to globalization that had begun with the foundation of the General Agreement on Tariffs and Trade (GATT) in 1947.

Coincidentally or not, many Canadian manufacturers were too small and inefficient to go head-to-head with U.S. competitors, so they simply closed their doors. Others retooled or restructured to cut production costs. The impact on employment was swift and compounded by another steep recession in 1990-91. Since then, however, the tide has been turning. The economy has grown every year since 1993 and Canada is among the fastest growing industrial nations as the century draws to a close.

If he were here today, Sir Wilfrid would no doubt marvel at the changes that have occurred in our economy in the past 100 years. The Canada he knew, with a small, protected, resource-dependent economy, is now the world's seventh largest industrial power. But what of Sir Wilfrid's boast? Has the century belonged to Canada? A quick tour of the economy today will reveal how we measure up.

## STRUCTURE AND TRENDS

When Laurier made his bold prediction, Toronto and Montréal had a combined population of less than half a million people and three-quarters of Canadians lived off the land. The principal industry was farming and the hot growth sectors were mining, lumber and paper making. What we, today, call the old economy was then shiny and new. Now, as the century draws to a close, the economic landscape has evolved beyond anything Laurier might have imagined. It's not just the old model that has been laid to rest—the whole structure of the economy has changed.

### The Service Sector

Primary industries—agriculture, mining, fishing and forestry—are still critically important to our economy. But today, a typical Canadian is far more likely to work in an office, store or warehouse than at a farm, mine, mill or factory. The rise of the service sector is the most dramatic structural change to occur in the economy this century. Service industries now employ three out of every four Canadians and generate two-thirds of our gross domestic product or GDP, the value of all goods and services we produce in the economy.

Contrary to popular belief, the ascension of the service sector began in the early years of the century. On the consumer side, it was largely a function of urbanization. Many city dwellers lacked the time, skills or inclination to perform household tasks that had been a part of daily life on the farm. They looked to others to bake bread, make clothing, fix their cars

and care for their children. Those who could afford it hired domestic servants, but retail stores, tailor shops, dry cleaners, restaurants, movie theatres, transit companies and other service businesses sprang up to meet their needs as well. While consumer services expanded, legal, accounting and other business services were also growing. By the end of the First World War, the service sector employed more people than the primary industries and in the early 1920s took over as the number one contributor to GDP.

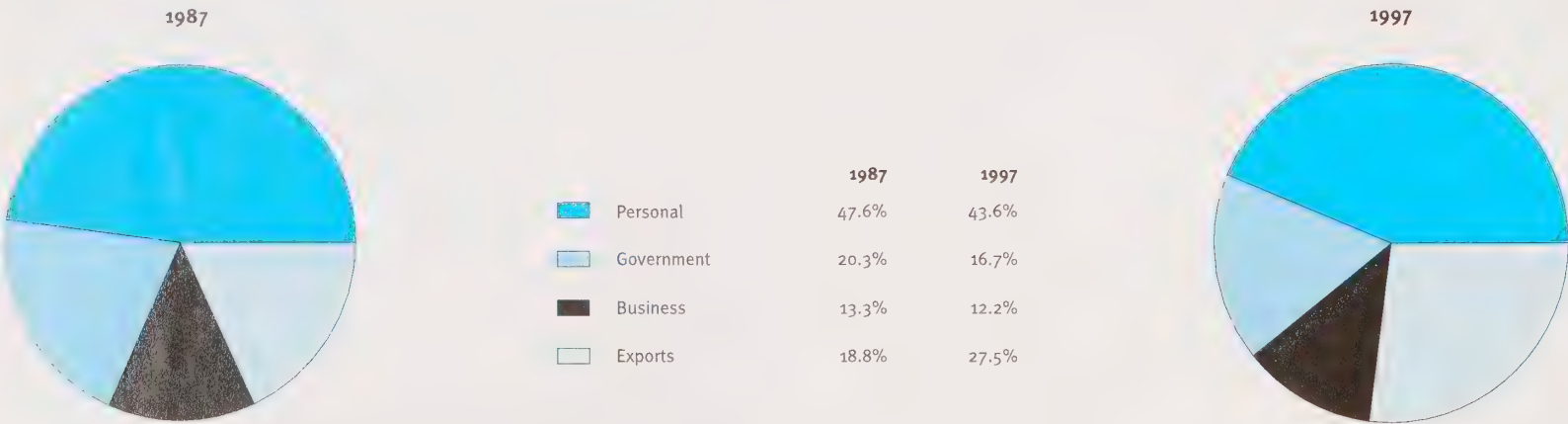
In the boom years after the Second World War, the trend gained more steam as automation pushed workers out of factory jobs into service occupations. At the same time, the first wave of the baby boom generation, those born between 1946 and 1964, was reaching school age, sparking an explosive demand for teachers and school administrators. Indeed, education was one of the fastest-growing industries through the 1950s and 1960s.

Other public services, including health care, transit and recreation, also joined the service parade.

Although the service sector dominates the economy and labour market, there are many misperceptions about it. Some people suggest that the service sector has gone too far too fast and is weakening the economy because it doesn't create real wealth. This is simply not the case.

Services are less tangible than goods and sometimes it's hard to see the value they create. The retail sector provides a good example. If you need a hammer, you can buy one at a local hardware store in a matter of minutes. What's the alternative? You could go to the factory where the hammer might sell for less, but what if the factory were in another city or country? How long would it take to get there and what would it cost? When wholesalers and retailers do the leg work, consumers save time, money and

Who are the big spenders in Canada's economy?



Note: The rise in exports is likely due to the introduction of the GST which boosted exports by removing the old FST and hence lowering the prices of our exports to foreign purchasers.

Source: Statistics Canada, Catalogue no. 13-001-XPB.



bother and so part of what the wholesalers and retailers are selling is the leg work.

Another myth is that the service industry is a low-wage, low-skill ghetto. It's true that technological change and industrial restructuring have pushed some people out of high-paid jobs in the primary and manufacturing industries into lower-paid, lower-skilled service work. But much of the service industry demands more skill and knowledge than it takes to flip a burger. For example, doctors, nurses, lawyers, teachers and airline pilots are all service workers—a far cry from the low-wage, low-skill myth! Also, the fastest-growing industry in the country—business services—employs a larger percentage of university graduates than any other industry, save for health care.

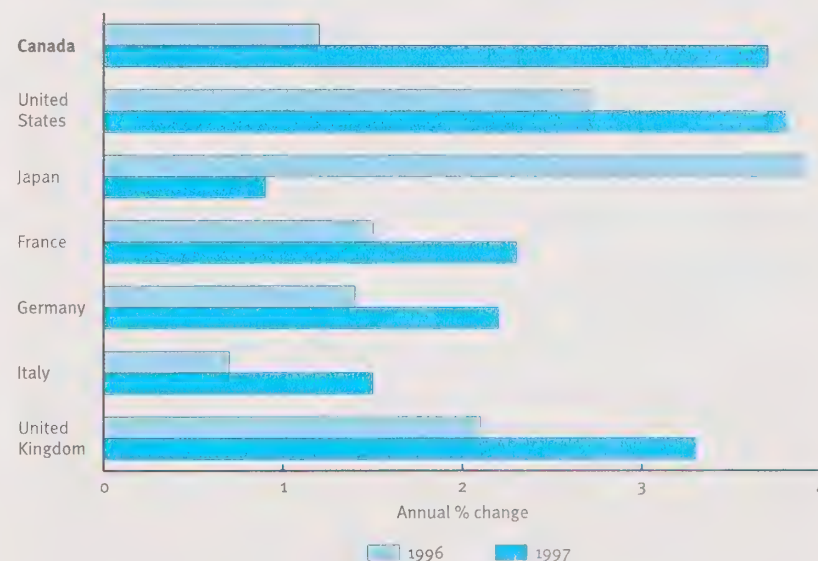
Services are a \$600-billion business in Canada today. But the biggest player in the service sector isn't a business at all; it's government. Health, education, transportation, and other public services from the three levels of government made up nearly 30% of the service sector in 1997. Next on the list was the finance, insurance and real estate sector, which commanded 25% of the action, while the wholesale and retail sectors each captured almost 10%.

Those who cling to the notion that the shift to a service-dominated economy sector is undesirable will be pleased to know that the trend has actually reversed in the 1990s. Since 1993, goods-producing industries have grown 15%, compared with 10% for services. The reversal can be attributed entirely to the contraction of public services as deficit-conscious governments have cut spending. This fiscal restraint may continue, but it is a safe bet that the service sector as a whole is just pausing to catch its breath. The rapid growth in business services, for one, indicates that increases will soon resume.

## The Rise and Fall of Inflation

Since Confederation, Canada has seen periods of both inflation, when consumer prices rise, and deflation, when they clearly move in the opposite direction, as was the case for several years during the Great Depression. During the post-war boom, the Bank of Canada was fairly successful in keeping inflation under control even during times of rapid economic growth. By the late 1960s, however, traditional Bank policies were proving less successful. Inflation was pushing 4% and hit double digits in the early

Real GDP growth in the Group of Seven countries



Source: *Main Economic Indicators, 1998*, Organisation for Economic Co-operation and Development.



## *The Group of Seven*

*The Group of Seven, or G7 for short, is a very exclusive club. To be a member, you have to be the leader of one of the seven largest industrial economies in the world: Britain, Canada, France, Germany, Italy, Japan and the United States. The club was founded in 1975, actually as the G6. The world leaders invited Canada to join a year later, and in 1997, Russia attended the annual summit as a guest and may soon be invited to sit as a permanent member.*

*Each year, the presidents, chancellors and prime ministers from G7 nations meet to discuss the key international issues of the day. While their focus is primarily economic, leaders also deal with broader issues including international terrorism and organized crime, the environment and human rights.*

*As there is no G7 headquarters or secretariat, the host country is responsible for organizing each meeting. Canada has hosted three summits: Ottawa (held in Montebello, Quebec) in 1981, Toronto in 1988 and Halifax in 1995.*

1970s. In 1975, the government established the Anti-Inflation Board to regulate wage and price increases. Still, it seemed that inflation had become a permanent feature of the Canadian economic landscape. A basket of goods and services for which a typical family paid \$100 in 1975, cost \$232 just a decade later.

Remarkably, in the 1990s, inflation has all but disappeared. Technological advances and global competition have helped to check rising prices in all industrial nations. On top of this, Canada's tight monetary and fiscal policies have pushed our inflation rate to among the lowest in the world. Throughout the 1990s, consumer prices have advanced at an average annual pace of 1.5%, compared with 7.9% in the 1970s and 5.7% in the 1980s. What's more, in 1997, the cost of producing goods and services in Canada grew less than half of one percent, the smallest increase in any year since the Depression.

Throughout the 1960s, 1970s and 1980s, a generation of Canadians grew up with the expectation that prices would rise every year. Wage demands, purchasing and investment decisions all involved a degree of guess work about where prices would be in a month, a year or two years down the road. But a decade of stable prices have put an end to inflationary expectations. Workers, businesses, people saving for retirement and others can be much more certain about the future course of prices. They can plan more effectively and invest more strategically. A consequence of this, without a doubt, has been an improved outlook and therefore a stronger, faster-growing economy.

## **ECONOMIC SIZE AND GROWTH**

In 1997, the value of goods and services produced in Canada, known as gross domestic product, or GDP, was \$867 billion. In the league of industrialized nations, Canada now stands seventh, ranking ahead of Spain and behind Italy. What's more, after two years of slow growth, our economy

picked up steam in 1997, expanding 3.8% in volume. In the growth race, Canada was tied with the United States at the head of the pack while the major European economies were stuck in the slow lane with growth rates in the 2.0% range; and Japan, with 0.8%, was barely moving forward.

These numbers spell good news for Canadians. Sustaining this performance will mean more jobs and higher incomes. But in a country as large as this, with our complex economy, GDP statistics provide only the broad picture. A closer examination of the different regions and industries offers a better idea of what's really happening.

Although 1997 was a year of healthy growth for Canada, there were significant variations among industry sectors. In fact, more than half of the total expansion in output came from 10 industries, and one-third of the total growth was concentrated in three of them.

### The Industrial Growth Chart

As more Canadians jump onto the information highway, it's no surprise to find that communications suppliers are leading the growth parade. Telecommunications carriers, broadcasters and cable operators are working overtime to keep up with demand for their products and services.

Providers of business services were also at the top of the growth charts in 1997. This group includes hundreds of thousands of companies and self-employed people who help businesses do their business. They provide everything from legal advice and accounting services to computer programming, public relations and secretarial help. The business services sector has been fuelled by the trend in large corporations and governments to contract outside companies or sometimes former employees to do work that used to be done in-house.

Then, there are the "middle" wholesalers—those who buy products at home and abroad and distribute them to retailers who then sell them to end users. In 1997, this sector had its best year in more than a decade, as sales expanded 13%.



Work by Bill Stapleton

*Homeless*



While the three fastest-growing industries in 1997 were in the service sector, manufacturers also had a good year. Makers of furniture, transportation equipment, machinery and electronic goods reported double-digit gains in output for 1997, as did metal fabricators and oil and gas producers.

### **Hard Times for Natural Resources**

Many of the slowest-growing industries in 1997 were concentrated in the natural resource sector, with the notable exception of oil and gas. This continued the trend from the previous year and there are few prospects of quick relief for resource workers or shareholders. The chief villain behind their misfortune has been tumbling world prices. For example, since 1995, the price of copper and wood pulp has dropped more than 20%. Resource prices were already weak when the slump triggered by the Asian financial crisis further cut into Canadian resource exports. As a result, output in both the mining and forestry sectors dropped 4% in 1997.

### **The Public Sector**

In the 1990s, no industry sector has seen its fortunes sink faster than the public sector. Some people are reluctant to think of government as an industry because of the differences between public and private sector transactions. For instance, the price of many government services is not clear because they are paid for indirectly, through taxes. Also, governments provide services that some Canadians don't want or can't use, but must pay for just the same.

In reality, however, Canadians rely on governments for thousands of services, some of them very vital—from plowing roads, to inspecting food, to representing Canada abroad. In 1997, these services were valued at more than \$190 billion. But the federal, provincial and municipal governments and related public sector industries are smaller now than they were in 1993.

Output in the health-care sector, for example, fell 10.0% during this period, while in the education sector, there was a 2.5% decline.

## **THE REGIONAL PICTURE**

History and geography have dealt different strengths and weaknesses to each of Canada's regions. Some are closer to major markets than others. Government economic policies differ widely from one area to another. Natural resource endowments differ as do regional labour forces. In any given year, these and other factors generate different rates of growth in output, investment, employment and income. Over time, they have produced different levels of regional prosperity. Atlantic Canada, for example, which has almost 8.0% of Canada's population, accounts for only 5.9% of national GDP. Alberta, on the other hand, with 9.0% of the population, produces 11.6% of GDP.

In 1997, historical trends were reinforced by variations in regional growth rates. The Prairie provinces led the way for the second year in a row, as output expanded 5.7% on the strength of booming oil and gas and construction industries. Manufacturing powered Ontario past the national rate, clocking a growth rate of 4.5%. Quebec lagged behind at 2.8% as investments dropped and the public sector contracted. British Columbia, the perennial growth leader until 1994, trailed the national average for the third year in a row as a soft forest sector grew only 2.2%. Finally, in Atlantic Canada, the economy grew just 1.1% as major capital projects such as the Hibernia oil platform and Confederation Bridge were winding down.

## **THE SPENDERS**

Up until now, we have been describing the supply side of the Canadian economy, in other words, those sectors that produce goods and services. But there is the other critical side—the demand or spending side. In the

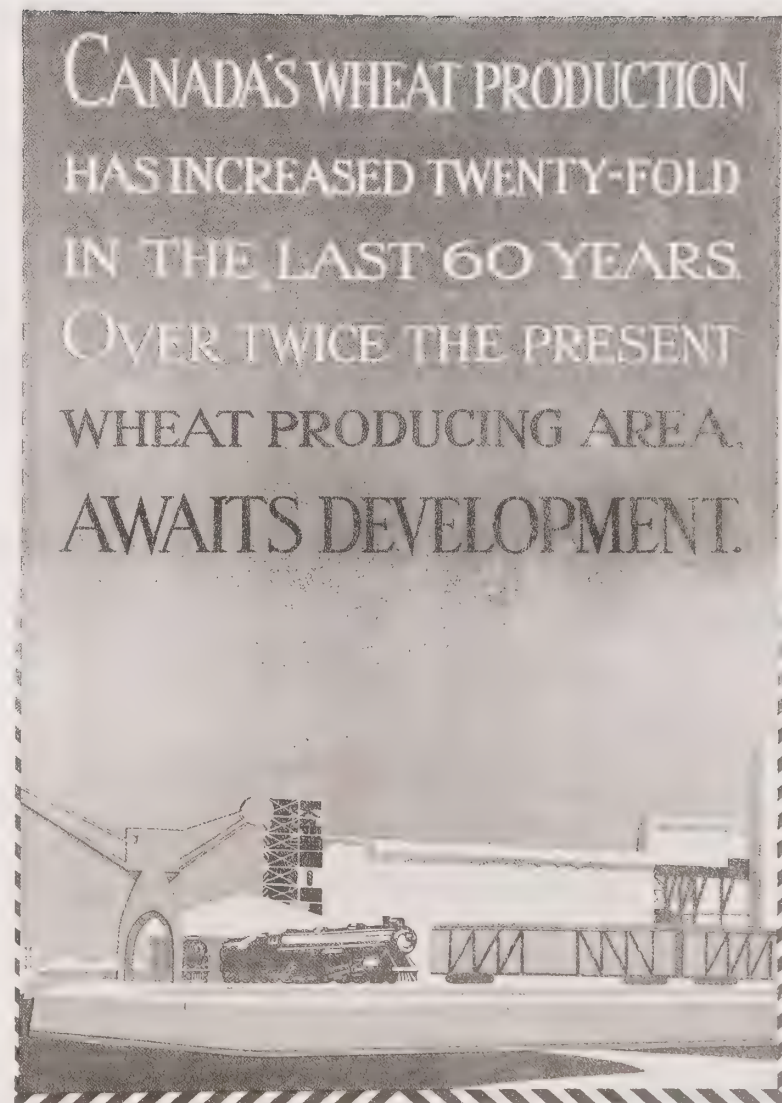
long term, the demand side rules in a market economy. When spending grows and suppliers of goods and services are able to expand their output, the result is a growing economy. Knowing who the spenders are helps to explain regional and sectoral growth patterns and reveals something about the jobs that are being created along the way.

Total spending on goods and services in the economy, also known as aggregate demand, comes from four sources: consumers, governments, the international sector and business investment.

The largest single component of aggregate demand—worth more than \$550 billion in 1997—is what households spend on everything from food and shelter, to entertainment and travel. In 1997, low interest rates and a brighter employment picture lured Canadians to stores and showrooms in record numbers. To pay for the spending spree, they emptied their pockets and their bank accounts and drove the rate of saving to record lows. With big-ticket items such as vehicles, furniture, appliances and homes leading the way, household spending grew 4.8% in volume in 1997—the best increase of the decade—and pumped an extra \$33.9 billion into cash registers across the country.

The federal, provincial and municipal governments are the next biggest spenders in the economy. Their combined expenditures came to \$386 billion in 1997. Of this, \$192 billion was spent on goods and services: everything from guns for the military, to office rentals, to the salaries of employees who run government programs. In sharp contrast to consumers, however, government spending on goods and services has been shrinking and is lower now than in 1994. In 1997, governments put \$0.5 billion less into Canadian cash registers than they had the year before.

After a quarter century of deficits, the combined government sector reported a budget surplus of \$7.4 billion in 1997. Through the 1970s, 1980s and into the 1990s, its expenditures had consistently exceeded revenues. In 1992 alone, the gap was more than \$55 billion. To finance the shortfall, governments had to borrow and by 1995, they had racked up a total debt of



National Archives of Canada, C-126201 (artist unknown)

Colour lithograph, early 1930s.



## *S w e e t   E x p o r t s*

*Often when we think of Canada's agricultural exports, we think of wheat, or potatoes or beef. But a little known product of Canada's farms has us in the top ranks when it comes to this export. The product in question is honey.*

*There are an estimated 30 billion honeybees at work in Canada. Mostly, they live on the Prairies, given their preference for long hot summer days and undulating fields of clover, alfalfa and canola. Their prodigious output has turned Canada into one of the top five honey producers of the world.*

*Up to 33% of Canadian honey goes to the United States and in recent years, the world has been at our doorstep, in search of*

*this product's renowned taste and quality.*

*In Canada, interest in the honey industry began before the First World War with the first Dominion Apiarist in charge of beekeeping, F.W.L. Sladen. Sladen established a Bee Division within the Department of Agriculture and throughout the early 1900s, experimented with wintering bees, honey flow and the flowering sequence of plants. He also began breeding queen bees using honeybees from Italy.*

*In 1921, Sladen's successor, Charles Gooderham, continued this work and his achievements and those of Sladen put Canada on the international honey map.*

*In 1996, Canada's honey production was*

*valued at \$70 million. However, since honeybees are also key in the pollination of certain agricultural crops, the value of their work for 1996 was estimated at about \$500 million. The honey sector is concentrated largely in the Prairies where the number of bee colonies is greatest. Every year, beekeepers, or apiarists, harvest about 30,000 tonnes of honey: more than a third from Alberta.*

*In fact, Alberta, Saskatchewan and Manitoba produce 75% of Canada's honey and it is from their fields of clover, canola and alfalfa that comes the so-called white honey, classified as Canada No. 1.*

*In 1995, a very dry year in the southern hemisphere reduced the stocks of honey*

*available from New Zealand, Australia and Argentina, and so international demand for honey generally increased. In addition, the United States imposed a quota on honey from China, and turned to Canada for supplies. This literally tripled our exports to them. To a lesser extent, we also sent honey to Germany, the United Kingdom, Japan and France.*

*The vagaries of weather also affect Canada's honey harvests. In 1996, for example, a cool and wet spring and a long and cold winter resulted in a lowered honey harvest: only 27,000 tonnes, compared with 30,500 tonnes in 1995. However, the production value rose to \$70 million, some 10% higher than the previous year, given the*

*higher prices paid to honey producers.*

*Canada also imports honey. From 1994 to 1996, we brought in about 5.5 million kilograms of lower quality, less expensive honey—mostly from China. These imports were used to make up the shortfall for industries that want a lower grade honey as sweetener for such items as donuts, cereals and shower gels.*

*Apiarists face a somewhat uncertain future in Canada, however. Parasites such as the tracheal and Varroa mites can be fatal and devastating to colonies. In the United States, these mites have destroyed thousands of bee colonies. In 1987, Canada banned all imports of U.S. honeybees as a protective measure.*

*In 1990, Canadian beekeepers and scientists began developing a superior queen honeybee—one that would resist mites and tolerate cold weather better.*

*The world leader in honey production is China. On the global scene, Canada stands as a major international player behind the United States, Mexico and Argentina.*





*Photo by Kate Williams*

**Langley, British Columbia.**



\$725 billion—roughly \$24,000 for every Canadian—at an annual interest charge of more than \$75 billion.

When a family is struggling to meet heavy mortgage payments, it may try to cut less essential expenditures or find a way to boost its income. Governments faced a similar choice in the late 1980s and early 1990s and opted to do both. While some governments have been more aggressive than others (for example, raising taxes and supplying fewer goods and services to Canadians), both the federal and provincial governments registered a combined surplus of \$7.4 billion. What to do with this fiscal dividend is a matter of great debate. Some favour tax cuts while others call for new spending on health, education and social services. For the foreseeable future, however, government spending is unlikely to emerge as an engine of growth in the economy.

## The International Sector

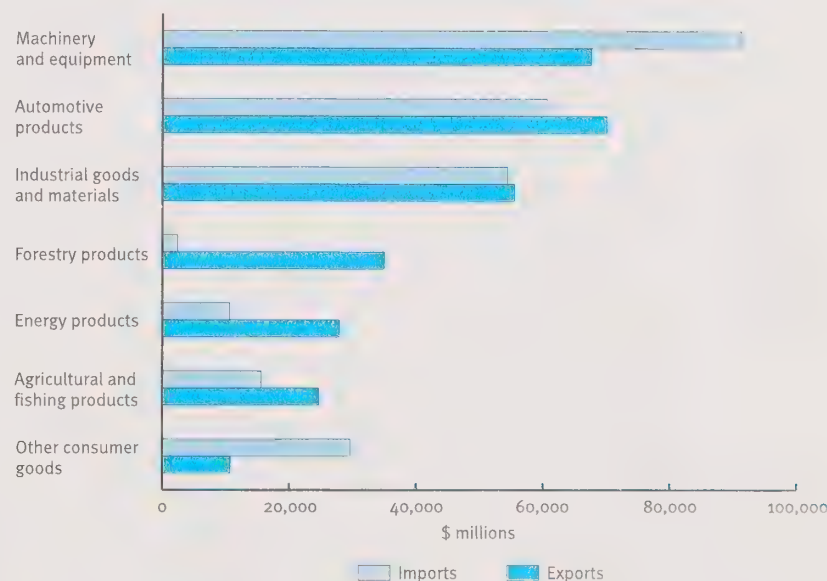
As a trading nation, imports and exports have always played an important role in our economy. In fact, more than 40% of the goods and services that Canadians produce are sold in foreign markets—up from 30% a decade ago. There have also been changes in the composition and final destination of our export sales.

Since Canada signed the Free Trade Agreement, exports to the United States have grown dramatically. In 1997, they topped \$244 billion and now account for more than 80% of total export sales. What's more, manufactured products, which support more jobs than do sales of semi-processed or raw resources, account for a growing share of our exports to the United States. In 1997, for example, we shipped more consumer goods to the American market than oil or wheat. However, with most of our export eggs now in a single basket, a downturn south of the border would quickly dampen Canada's economic prospects.

From a spending or demand perspective, the impact of the international sector depends on the difference between what we buy and sell abroad. When exports outstrip imports, foreigners are net spenders in our economy. When imports are greater than exports, Canadians are net debtors to the rest of the world. Economists refer to this as the balance of trade.

However, a weak trade balance does not necessarily reflect a weak economy. In fact, the opposite is usually true. We have recorded our highest

Canada's imports and exports, 1997



Source: Statistics Canada, CANSIM matrix 3685.



## Nations Together

*The Organisation for Economic Co-operation and Development, or OECD, is composed of representatives of 29 industrialized countries who gather to discuss ways to promote economic growth, higher living standards, expanding trade and free movement of investment throughout the world.*

*Sometimes, these talks lead to formal treaties, in which members agree to follow a common strategy in areas such as protecting the environment and combatting bribery and corruption. More often, however, the members use the OECD as a forum for sharing information.*

*The OECD is based in Paris, France, although meetings may take place around the world. The organization works in two official languages, English and French, and employs economists and researchers from all member countries.*

*Canada was a founding member of the OECD in 1961. The current Secretary-General of the OECD is Donald J. Johnston, a former Canadian cabinet minister.*

trade surpluses during recessions, when falling domestic demand has squeezed imports out of the economy. Conversely, when domestic demand is doing well, we tend to buy more products from abroad. This is exactly what happened in Canada in 1997, when a surge in domestic spending for goods such as automobiles, computers and industrial machinery sent our import bill up and our current account back into a \$17 billion deficit.

### The Canadian Dollar

One of the key reasons domestic spending picked up in 1997 had to do with Canada's very low interest rates. Both loans and mortgages now come with interest rates that are the lowest Canadians have seen in a generation, and in many instances, have fallen below comparable rates in the United States, for the first time ever.

Partly as a consequence of this, the Canadian dollar had also fallen to near historic lows. The international value of the dollar is the product of millions of transactions made every day on foreign exchange markets. As much as \$1.2 trillion, some of it Canadian, circulates through the world's money markets every day searching for the best combination of security and yield. Earlier in the 1990s, we were able to attract a healthy share of these funds. More recently, we have not fared so well. With Canadian interest rates at record lows, particularly compared with those of the United States, investors have simply found more profitable places to put their money.

Yet, while this so-called hot money flits from country to country at the tap of a computer key, it is really the flow of direct investment that reveals the longer-term trends.

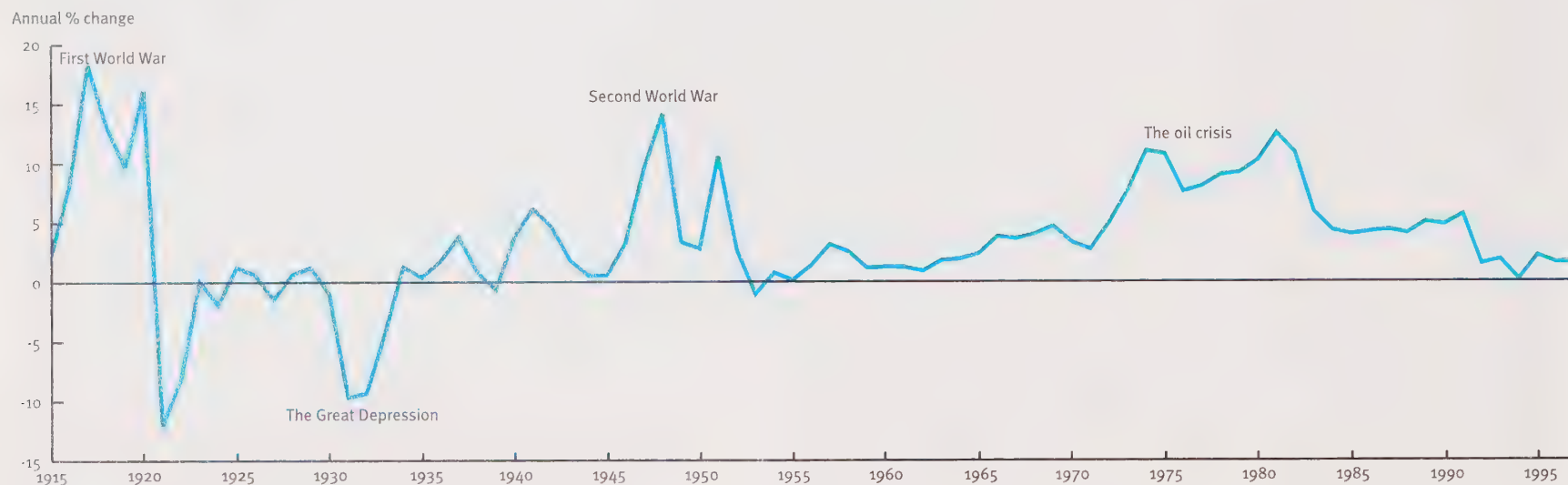
For years, Canada has seen a net inflow of direct investment, especially as American firms found their way into our mining and manufacturing sectors after the Second World War. Ultimately, this has fanned enor-



*Photo by Kate Williams*

A street scene in Québec, 1972. The 1970s were difficult years for many Canadians, with the oil price shock, rising consumer prices and falling job levels.

## Annual % change in the Consumer Price Index



Source: Statistics Canada, Catalogue no. 62-010-XPB.

mous concern about foreign ownership of Canada's economy and in the 1970s, led to the establishment of restrictions and reviews on investment.

With the dismantling of barriers to investment around the world in the last decade, however, the tables have turned. In each of the last few years, Canadian firms have invested more abroad, in their U.S. and overseas operations, than foreigners have spent in Canada. In fact, the \$6.5 billion gap between the two in 1997 was the largest in our history and is another measure of Canada's increasing integration into the global economy.

## BUSINESS INVESTMENT

After some hesitations in 1996, corporate profits rebounded sharply in 1997, rising 17% to \$78.9 billion. Some flowed to shareholders in the form of dividend payments and some to governments in the form of taxes. The remainder was supplemented by \$35 billion from new stock and bond issues and plowed into new plants and equipment. In 1997, business investment increased 15% to more than \$144 billion. This increase was triple that of the previous year and added \$18 billion to aggregate demand.



Capital investment is the most dynamic force in a market economy. Growth in production capacity is directly tied to the rate at which companies expand and modernize their facilities. So is employment. Investment decisions directly influence the number, location and type of jobs created in the economy. In 1997, for example, the Prairies, followed by Ontario, led the investment race and also ran first and second in output and employment growth. With weaker investment performance, Quebec and Atlantic Canada followed in both categories. For the third year in a row, British Columbia trailed the pack, as investment tumbled in its large resource sector.

At a sectoral level, the link between investment and job growth is less direct and depends on the nature of business spending. In the oil and gas industry, pipeline construction and new drilling activity translate quickly into jobs for engineers, equipment operators, welders and labourers. But in other sectors, the picture is entirely different.

In the mid-1990s, the finance and communications industries have seen explosive investment coupled with strong demand for their products, while their work forces have actually grown smaller. Deregulation has sparked intense competition in both these sectors and generated tremendous pressures to improve productivity. The banks, insurance companies, local, long-distance and wireless communications suppliers have responded with huge investments in labour-saving technology. In the financial sector, 90% of new investment has been directed at high-tech upgrades. In 1997, computer purchases grew 22%, faster than any other investment category.

Moreover, this shift of business investment holds critical implications for these industries, since it may well mean fewer—not more—jobs, many of which will require high-level skills.



Canada's Royal Bank, downtown Toronto.



## EMPLOYMENT AND INCOMES

In 1997, the interaction of supply and demand created 265,000 new jobs in Canada—twice the number created in 1996. Again, there was considerable variation from sector to sector. Ten industries accounted for 83% of employment growth and one-third of the gain—86,000 new jobs—was in a single industry: business services. Business services have, in fact, led the job parade for two decades and now employ 1 million Canadians. As well, the payrolls of manufacturers grew 84,000, while the construction industry added 28,000 jobs.

Meanwhile, other sectors were not so kind to workers. Outside of the oil patch, employment in the primary industries shrank 2.5%. In the government sector, some 29,000 jobs disappeared. As noted earlier, the finance and communications industries also shed workers.

Canada's unemployment rate in 1997 averaged 9.2%, down from 9.7% the year before; the trend continued into 1998, settling at 8.4 % in May. For every 100 Canadians willing and able to work, 92 were employed, although not always in their chosen profession. Young people, however, bucked the national trend. The jobless rate of workers between the ages of 15 and 24 increased to 17.4%

On a regional basis, more than 15% of the Atlantic Canada labour force was unemployed in 1997, while 11.4% of Quebecers and 8.8% of Ontarians could not find work. The picture was much brighter on the Prairies where the jobless rate stood at 6.4%, while on the West Coast, 8.7% were jobless. With strong job growth continuing in 1998, rates were down in all regions by the middle of the year, save for that of British Columbia.

### Personal Incomes

Contrary to what might have been expected, the improved employment picture in 1997 did not put extra cash into the pockets of Canadians. With

more people working, labour income did advance 3.6%, but other revenues, including interest earnings, declined. Wage increases were virtually non-existent. In 1997, average hourly earnings for Canadian workers edged up a mere \$0.16 to \$14.87. After factoring in inflation, the result was that disposable income had dropped for the sixth time in seven years, standing 6.7% lower than in 1990. Happily, this trend has showed some signs of turnaround. In the first quarter of 1998, average after-tax incomes rose strongly to stand at \$17,456 per person.

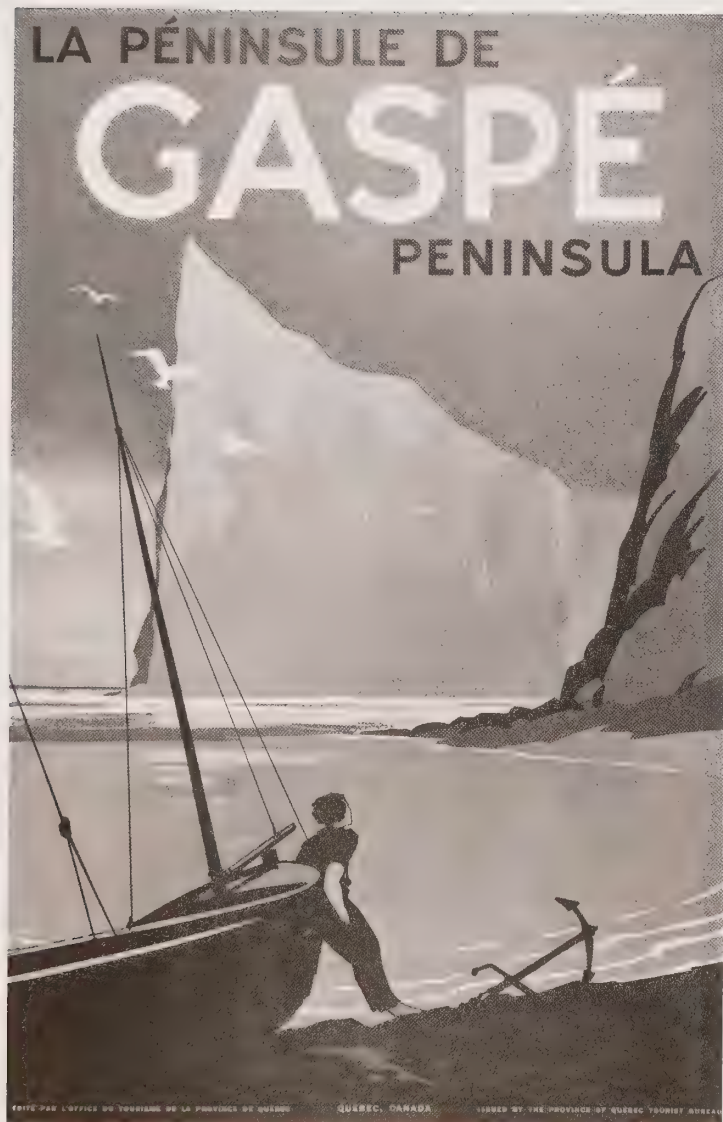
### Labour Participation

In 1997, fully 57 of every 100 women aged 25 to 54 were either working or looking for a job. This figure, referred to as the labour force participation rate, varies by age and gender, but for women has held fairly constant for a decade. For men in the same age group, the participation rate was about 74% and has been creeping slowly downward for a decade.

The most dramatic change in participation rates has occurred in those for youth. In 1990, their participation rate stood at 71%, but has fallen each year since. By 1998, only 61% of 15- to 24-year-olds were in the active labour force. Were it not for this decline in participation, the youth unemployment rate would have skyrocketed. It seems, however, that young Canadians have latched on to the reality that education is the key to success in today's labour markets. Since 1989, a rising rate of school enrolment has paralleled the decline in labour force participation. In 1997, a record 62% of young people were in school.

### Jobs and Education

For generations, parents have urged their kids to stay in school. Today, young people ignore this advice at their peril. One of the most striking economic trends to emerge in the 1990s is the growing connection between



Work by Ernest Senécal, National Archives of Canada, C-137968 (recto)

Colour lithographs, ca. 1945.



Work by Roger Couillard, National Archives of Canada, C-137667



education and job prospects. In this decade, 17% of jobs that require high school skills or less have disappeared. At the same time, the number of jobs for people with high school training or better has grown nearly 30%. In 1997, for example, two-thirds of the overall increase in employment was in the managerial and professional category, where jobs typically require a postsecondary degree or diploma.

Although the unemployment rate for young postsecondary graduates averaged 8% in 1997, it was still better than the national rate, one-half the overall rate for those aged 15 to 24, and one-quarter the rate for young people without high school education.

In dollar terms, this new “iron law” of wages also holds true. Adult Canadians who hold a postsecondary degree or diploma earn 40 to 45% more than those who don’t complete postsecondary studies. Data also show that families headed by low-skilled Canadians are twice as likely to find themselves in the low-income category as families in which the principal bread winner is a postsecondary graduate.

In Laurier’s day, the ticket to prosperity was a strong back and a willing spirit, a fact that held true for millions of Canadians right into the 1980s. Now, educated and trained minds have taken over. Education means better jobs and salaries and Canada’s ability to compete in global markets depends on the skills and knowledge of its work force.

As the century draws to a close, it is difficult to say whether Laurier’s bold prediction has come true. Certainly, it has been a century of enormous change, from farm to city, factory to office and now from the industrial to the information age. Canada has seen good times and bad, and overall, has adjusted well. While some countries boast higher GDP per capita, the United Nations Development Agency has praised Canada’s quality of life and, for four years in a row, has named Canada the best country in the world in which to live.

Despite the accolades, a number of economic problems, some with

serious social consequences, remain to be addressed. Unemployment is running at twice the level of the United States. Compared with other industrial nations, productivity growth has been sluggish. While Canada has aggressively pursued free trade with other nations, it has been slower to act on its own interprovincial trade barriers. Economic opportunity is not evenly shared among regions, or by young people.

In addition, family incomes have fallen 5% in real terms since 1989, and there is a growing incidence of poverty in Canada, particularly among children. One Canadian child in five is growing up in a low-income home where chances for social development and learning are most likely to be limited. These indicators do not point to a country at the top of its game.

Yet if Laurier stood at a podium today, he might well speak of the future with the same optimism he expressed 100 years ago—again, with good reason. He might well applaud the dramatic improvement in public sector finances that has occurred in the 1990s, restoring the capacity of government to invest in strategic activities, notably education. He might even point to the diversified nature of the Canadian economy, encouraged that the fastest-growing industries are in the knowledge sector. He would certainly welcome the reality of free trade with the United States, which he himself had proposed as early as 1911. He would point proudly to the highest rate of postsecondary enrolment in the industrialized world. Finally, he would nod approvingly at the news that young Canadians are staying in school longer and that more than a quarter of the adult population is involved in some kind of training or education program.

Just as the ingredients for prosperity under the old economic model were falling into place at the turn of the last century, many of the pieces to the new economic puzzle are doing the same today. Confident that Canadians will make the most of their opportunities, Laurier, if here today, would quite likely promise great things for Canada in the next century and new millennium to come.

## SOURCES

Department of Finance Canada  
Organisation for Economic Co-operation and Development  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Economic Observer**. Monthly. 11-010-XPB
- **National Economic and Financial Accounts, Quarterly Estimates**. Quarterly. 13-201-XPB
- **Guide to Income and Expenditure Accounts**. Occasional. 13-603MPE No.1
- **Canada's Balance of International Payments**. Quarterly. 67-001-XPB
- **Perspectives on Labour and Income**. Quarterly. 75-001-XPE

Selected publications from other sources

- **Budget 1998: Budget in Brief**. Department of Finance Canada. 1998.
- **Canada and International Financial Institutions**. Bank of Canada. 1996.
- **OECD Economic Outlook**. Organisation for Economic Co-operation and Development. Twice yearly.
- **OECD Economic Surveys**. Organisation for Economic Co-operation and Development. Annual.



## The Economy

### Legend

-- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 9.1 Gross Domestic Product<sup>1</sup> at Market Prices

	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
	\$ millions											
<b>Gross domestic product at market prices</b>												
1992	9,529	2,336	18,125	14,222	157,794	285,313	24,272	21,171	74,303	87,149	1,147	2,360
1993	9,756	2,469	18,341	14,901	162,467	291,716	24,620	22,862	80,166	93,490	964	2,491
1994	10,249	2,542	18,752	15,725	170,126	305,023	25,894	24,254	84,877	100,672	964	2,581
1995	10,803	2,709	19,479	16,708	177,221	322,874	27,091	25,449	87,647	104,786	1,095	2,712
1996	10,670	2,865	19,654	16,705	178,935	331,024	28,328	28,059	93,625	105,843	1,180	2,891
1997	10,880	2,943	20,322	17,061	185,366	347,149	29,246	28,260	101,069	109,347	1,131	2,915
<b>1997</b>												
Personal expenditure on consumer goods and services	7,320	1,881	14,314	11,130	111,356	199,353	18,238	16,564	51,754	71,390	609	1,069
Government current expenditure on goods and services	3,369	834	6,507	4,488	39,688	61,005	6,540	5,661	14,916	22,030	523	1,451
Government investment in fixed capital	336	102	555	571	4,781	5,929	686	581	1,678	2,690	104	151
Business investment in fixed capital	2,197	359	3,151	1,994	23,915	52,387	4,345	6,310	25,629	19,202	202	634
Government investment in inventories	—	—	—	—	2	3	—	—	—	—	—	—
Business investment in inventories	68	64	132	170	1,978	2,751	-43	-602	614	1,456	7	15
Net exports plus statistical discrepancy	-2,410	-297	-4,337	-1,292	3,646	25,721	-520	-254	6,478	-7,421	-314	-405
<b>Final domestic demand</b>	<b>13,222</b>	<b>3,176</b>	<b>24,527</b>	<b>18,183</b>	<b>179,740</b>	<b>318,674</b>	<b>29,809</b>	<b>29,116</b>	<b>93,977</b>	<b>115,312</b>	<b>1,438</b>	<b>3,305</b>

1. Expenditure-based.

Source: Statistics Canada, CANSIM, matrices 9015 to 9026.

9.2 Gross Domestic Product<sup>1</sup> at Market Prices

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>Gross domestic product</b>	<b>611,785</b>	<b>656,190</b>	<b>678,135</b>	<b>683,239</b>	<b>698,544</b>	<b>724,920</b>	<b>762,251</b>	<b>799,129</b>	<b>820,323</b>	<b>856,134</b>
Wages, salaries and supplementary labour income	325,248	350,743	368,891	379,091	387,788	395,047	405,163	419,096	429,601	445,924
Corporation profits before taxes	64,060	58,807	43,988	32,101	31,978	40,354	59,467	70,355	67,988	79,765
Government business enterprise profits before taxes	6,800	7,218	6,429	5,153	5,971	4,811	5,824	6,517	6,476	6,769
Interest and miscellaneous investment income	42,188	48,013	54,874	54,486	52,742	52,370	51,813	50,167	48,789	47,165
Accrued net income of farm operators from farm production	3,263	1,962	2,065	1,643	1,730	2,544	1,697	2,228	3,457	1,969
Net income of non-farm unincorporated business including rent	33,113	34,856	35,544	37,022	39,398	41,949	44,189	46,463	49,491	53,023
Inventory valuation adjustment	-3,093	-1,452	300	1,084	-3,285	-3,107	-5,337	-2,410	-1,569	-1,647
Net domestic income at factor cost	471,579	500,147	512,091	510,580	516,322	533,968	562,816	592,416	604,233	632,968
Indirect taxes less subsidies	73,409	82,689	86,363	89,654	94,265	98,898	102,925	106,571	109,944	114,714
Capital consumption allowances	68,592	73,742	79,701	83,019	86,424	90,279	95,323	100,737	105,935	110,428
Statistical discrepancy	-1,795	-388	-20	-14	1,533	1,775	1,187	-595	211	-1,976

1. Income-based.

Source: Statistics Canada, CANSIM, matrix 6547.

9.3 Gross Domestic Product<sup>1</sup> at Market Prices

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>Gross domestic product at market prices</b>	<b>611,785</b>	<b>656,190</b>	<b>678,135</b>	<b>683,239</b>	<b>698,544</b>	<b>724,920</b>	<b>762,251</b>	<b>799,129</b>	<b>820,323</b>	<b>856,134</b>
Personal expenditure on consumer goods and services	339,728	366,851	386,913	399,932	412,940	429,994	445,879	460,033	477,927	505,373
Durable goods	49,434	52,042	50,837	48,417	48,808	49,937	53,862	55,682	58,500	66,108
Semi-durable goods	35,118	36,977	37,870	37,739	38,129	39,269	41,749	42,691	43,117	45,579
Non-durable goods	90,009	96,047	101,896	106,685	108,307	111,608	112,206	114,545	118,720	122,422
Services	165,167	181,785	196,310	207,091	217,696	229,180	238,062	247,115	257,590	271,264
Government current expenditure on goods and services	128,408	139,000	151,977	162,765	169,262	170,760	169,599	171,072	168,965	168,501
Government investment in fixed capital	15,699	17,712	19,246	19,209	18,836	18,459	20,056	20,105	19,271	18,241
Government investment in inventories	64	-3	67	-37	-40	-4	-1	30	-2	5
Business investment in fixed capital	117,963	127,964	121,750	111,134	108,209	106,988	117,794	115,237	121,907	140,325
Residential construction	42,447	46,848	41,776	36,821	39,903	39,479	42,023	36,270	40,083	45,965
Non-residential construction	33,617	36,174	37,380	35,395	29,654	30,183	33,953	34,124	35,437	39,230
Machinery and equipment	41,899	44,942	42,594	38,918	38,652	37,326	41,818	44,843	46,387	55,130
Business investment in inventories	3,403	4,066	-2,727	-5,845	-6,522	565	2,143	8,134	1,045	6,610
Non-farm	3,998	3,533	-3,352	-5,898	-5,810	-686	2,245	8,046	448	8,063
Farm and grain in commercial channels	-595	533	625	53	-712	1,251	-102	88	597	-1,453
Exports of goods and services	163,842	168,936	175,513	172,161	189,784	220,106	261,692	302,199	320,739	344,462
Merchandise	143,533	146,962	152,056	147,670	163,464	190,382	227,895	264,940	280,570	301,602
Non-merchandise	20,309	21,974	23,457	24,491	26,320	29,724	33,797	37,259	40,169	42,860
Deduct: Imports of goods and services	159,117	168,723	174,624	176,093	192,393	220,174	253,724	278,276	289,319	329,359
Merchandise	132,714	139,216	141,000	140,658	154,428	177,594	208,593	231,206	239,578	278,237
Non-merchandise	26,403	29,507	33,624	35,435	37,965	42,580	45,131	47,070	49,741	51,122
Statistical discrepancy	1,795	387	20	13	-1,532	-1,774	-1,187	595	-210	1,976
<b>Final domestic demand</b>	<b>601,798</b>	<b>651,527</b>	<b>679,886</b>	<b>693,040</b>	<b>709,247</b>	<b>726,201</b>	<b>753,328</b>	<b>766,447</b>	<b>788,070</b>	<b>832,440</b>

1. Expenditure-based.

Source: Statistics Canada, CANSIM, matrix 6548.

9.4 Gross Domestic Product<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ constant 1992 (millions)									
<b>Gross Domestic Product</b>	<b>686,176</b>	<b>703,577</b>	<b>705,464</b>	<b>692,247</b>	<b>698,544</b>	<b>716,123</b>	<b>744,220</b>	<b>760,309</b>	<b>769,730</b>	<b>799,142</b>
Personal expenditure on consumer goods and services	392,093	406,034	411,343	405,783	412,940	420,595	433,812	441,263	451,682	469,282
Durable goods	51,396	51,968	50,522	48,467	48,808	49,254	51,647	52,508	54,465	60,954
Semi-durable goods	40,802	41,207	41,044	37,892	38,129	39,117	41,434	42,550	42,816	44,382
Non-durable goods	105,954	108,039	107,941	107,122	108,307	109,540	113,146	114,419	116,773	117,761
Services	193,207	204,239	211,564	212,229	217,696	222,684	227,585	231,786	237,628	246,185
Government current expenditure on goods and services	152,897	157,195	162,937	167,541	169,262	168,864	165,888	165,244	163,164	163,019
Government investment in fixed capital	14,875	16,542	17,665	18,899	18,836	18,444	19,730	19,487	18,773	17,760
Government investment in inventories	71	-1	73	-37	-40	-3	-1	30	-2	4
Business investment in fixed capital	115,783	121,883	115,727	109,783	108,209	104,976	112,397	108,914	115,819	132,135
Residential construction	46,539	48,480	43,527	37,231	39,903	38,401	39,820	34,189	37,928	42,912
Non-residential construction	35,149	36,229	36,313	35,138	29,654	29,803	32,430	32,191	33,581	36,637
Machinery and equipment	36,411	39,216	37,476	37,678	38,652	36,772	40,147	42,534	44,310	52,586
Business investment in inventories	2,381	4,389	-1,999	-5,769	-6,522	440	2,919	7,429	944	6,192
Non-farm	4,280	3,571	-3,434	-6,259	-5,810	-864	2,302	6,987	384	6,737
Farm and grain in commercial channels	-1,633	782	1,231	346	-712	1,304	617	442	560	-545
Exports of goods and services	162,162	164,203	171,977	175,926	189,784	212,603	237,684	259,695	274,456	297,985
Merchandise	139,838	140,990	147,791	151,395	163,464	183,444	205,526	225,109	238,215	259,958
Non-merchandise	22,294	23,293	24,248	24,555	26,320	29,159	32,158	34,586	36,241	38,027
Deduct: Imports of goods and services	161,382	171,580	175,482	181,120	192,393	208,046	227,054	242,306	254,908	289,068
Merchandise	131,911	138,851	139,593	143,829	154,428	168,758	187,532	202,184	212,911	246,720
Non-merchandise	29,203	32,602	36,031	37,466	37,965	39,288	39,522	40,122	41,997	42,348
Statistical discrepancy	2,036	479	52	11	-1,532	-1,750	-1,155	553	-198	1,833
<b>Final domestic demand</b>	<b>677,369</b>	<b>704,088</b>	<b>708,954</b>	<b>702,560</b>	<b>709,247</b>	<b>712,879</b>	<b>731,827</b>	<b>734,908</b>	<b>749,438</b>	<b>782,196</b>

1. Expenditure-based.

Source: Statistics Canada, CANSIM, matrix 6549.



## 9.5 Gross Domestic Product Implicit Price Indexes

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1992 = 100									
<b>Gross domestic product at market prices</b>	<b>89.2</b>	<b>93.3</b>	<b>96.1</b>	<b>98.7</b>	<b>100.0</b>	<b>101.2</b>	<b>102.4</b>	<b>105.1</b>	<b>106.6</b>	<b>107.2</b>
Personal expenditure on consumer goods and services	86.7	90.4	94.0	98.5	100.0	102.2	102.8	104.3	105.8	107.7
Durable goods	96.2	100.2	100.6	99.9	100.0	101.4	104.3	106.0	107.4	108.5
Semi-durable goods	86.1	89.7	92.3	99.6	100.0	100.4	100.8	100.3	100.7	102.7
Non-durable goods	85.0	88.9	94.4	99.6	100.0	101.9	99.2	100.1	101.7	104.0
Services	85.5	89.0	92.8	97.6	100.0	102.9	104.6	106.6	108.4	110.2
Net government current expenditure on goods and services	84.0	88.4	93.3	97.2	100.0	101.1	102.3	103.5	103.6	103.4
Government gross fixed capital formation	105.5	107.1	109.0	101.7	100.0	100.1	101.6	103.2	102.6	102.7
Business gross fixed capital formation	101.8	105.0	105.1	101.2	100.0	101.9	104.8	105.8	105.3	106.2
Residential structures	91.2	96.7	95.8	98.9	100.0	102.8	105.6	106.1	105.7	107.1
Non-residential structures and equipment	107.5	109.2	110.4	103.7	100.0	101.4	104.4	105.7	105.1	105.8
Non-residential structures	95.6	99.9	102.9	100.8	100.0	101.3	104.7	106.0	105.5	107.1
Machinery and equipment	115.1	114.6	113.6	103.3	100.0	101.5	104.2	105.4	104.7	104.8
Exports of goods and services	101.1	102.9	102.1	98.0	100.0	103.5	110.0	116.4	116.8	115.6
Goods	102.6	104.3	102.9	97.6	100.0	103.8	110.7	117.7	117.8	116.0
Services	91.1	94.4	96.8	99.8	100.0	101.9	105.1	107.7	110.8	112.7
Imports of goods and services	98.6	98.4	99.5	97.3	100.0	105.8	111.7	114.8	113.5	113.9
Goods	100.6	100.3	101.0	97.8	100.0	105.2	111.1	114.3	112.5	112.8
Services	90.4	90.5	93.3	94.6	100.0	108.4	114.2	117.3	118.4	120.7
<b>Final domestic demand</b>	<b>88.9</b>	<b>92.5</b>	<b>95.9</b>	<b>98.7</b>	<b>100.0</b>	<b>101.9</b>	<b>102.9</b>	<b>104.3</b>	<b>105.1</b>	<b>106.4</b>

Source: Statistics Canada, CANSIM, matrix 6544.

## 9.6 Balance of International Payments

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
\$ millions										
<b>Current account</b>										
<b>Receipts</b>	<b>181,791</b>	<b>186,280</b>	<b>194,972</b>	<b>188,719</b>	<b>205,455</b>	<b>236,016</b>	<b>284,517</b>	<b>330,596</b>	<b>349,981</b>	<b>375,637</b>
Goods and services	162,800	167,740	174,437	170,993	188,585	218,886	260,479	300,847	319,453	342,983
Goods	143,534	146,963	152,056	147,669	163,464	190,383	227,892	264,938	280,566	301,601
Services	19,267	20,777	22,381	23,324	25,122	28,503	32,587	35,909	38,886	41,382
Investment income <sup>1</sup>	16,262	15,902	17,581	14,820	13,770	13,792	20,462	25,932	26,045	28,092
Transfers	2,729	2,638	2,954	2,905	3,100	3,339	3,576	3,817	4,484	4,563
<b>Payments</b>	<b>200,120</b>	<b>212,091</b>	<b>218,107</b>	<b>214,348</b>	<b>230,815</b>	<b>264,214</b>	<b>304,741</b>	<b>338,203</b>	<b>346,326</b>	<b>392,623</b>
Goods and services	158,578	168,140	174,018	175,401	191,674	219,461	252,996	277,529	288,355	328,443
Goods	132,715	139,217	141,000	140,658	154,430	177,593	208,591	231,206	239,577	278,237
Services	25,863	28,923	33,018	34,743	37,245	41,868	44,406	46,323	48,778	50,205
Investment income <sup>1</sup>	37,764	40,162	40,206	34,761	34,903	40,646	47,674	56,654	53,749	59,942
Transfers	3,777	3,789	3,883	4,185	4,237	4,107	4,071	4,019	4,222	4,238
<b>Balance</b>	<b>-18,328</b>	<b>-25,812</b>	<b>-23,135</b>	<b>-25,629</b>	<b>-25,360</b>	<b>-28,198</b>	<b>-20,224</b>	<b>-7,607</b>	<b>3,655</b>	<b>-16,986</b>
Goods and services	4,222	-400	419	-4,408	-3,089	-575	7,483	23,318	31,098	14,540
Goods	10,819	7,747	11,056	7,011	9,034	12,790	19,302	33,732	40,989	23,363
Services	-6,597	-8,147	-10,637	-11,419	-12,123	-13,365	-11,818	-10,414	-9,892	-8,824
Investment income <sup>1</sup>	-21,502	-24,260	-22,625	-19,941	-21,133	-26,855	-27,212	-30,722	-27,705	-31,851
Transfers	-1,049	-1,151	-929	-1,280	-1,137	-768	-495	-202	261	325
<b>Capital account net flow<sup>2</sup></b>	<b>4,820</b>	<b>5,481</b>	<b>6,203</b>	<b>6,410</b>	<b>8,574</b>	<b>10,704</b>	<b>10,244</b>	<b>6,789</b>	<b>8,076</b>	<b>7,601</b>
<b>Financial account net flow<sup>2</sup></b>	<b>12,997</b>	<b>22,137</b>	<b>18,965</b>	<b>19,381</b>	<b>13,316</b>	<b>24,038</b>	<b>8,365</b>	<b>-3,459</b>	<b>-15,002</b>	<b>13,031</b>
<b>Canadian claims on non-residents, net flows</b>	<b>-17,602</b>	<b>-19,745</b>	<b>-19,699</b>	<b>-15,128</b>	<b>-14,411</b>	<b>-27,274</b>	<b>-48,907</b>	<b>-37,536</b>	<b>-68,339</b>	<b>-53,323</b>
Canadian direct investment abroad	-7,661	-6,235	-6,110	-6,685	-4,339	-7,570	-12,453	-15,296	-11,593	-17,926
Canadian portfolio investment	-4,482	-5,470	-2,596	-11,665	-11,749	-17,881	-8,836	-7,194	-18,451	-11,400
Foreign portfolio bonds	-74	-1,602	-75	-1,661	-1,401	-5,071	503	-997	-1,878	-6,961
Foreign portfolio stocks	-4,409	-3,867	-2,521	-10,004	-10,348	-12,811	-9,339	-6,197	-16,573	-4,440
Other Canadian investment	-5,459	-8,040	-10,993	3,222	1,677	-1,823	-27,617	-15,046	-38,295	-23,997
Loans	-4,629	-1,769	491	-131	-877	-1,255	-87	-3,464	-4,532	-21,187
Deposits	9,899	-3,606	-3,938	5,730	1,604	10,214	-19,889	-7,162	-19,495	-3,839
Official international reserves	-10,173	-818	-1,247	2,103	5,750	-1,206	489	-3,777	-7,498	3,388
Other claims	-555	-1,849	-6,299	-4,479	-4,800	-9,576	-8,130	-644	-6,769	-2,359
<b>Canadian liabilities to non-residents, net flows</b>	<b>30,599</b>	<b>41,882</b>	<b>38,664</b>	<b>34,509</b>	<b>27,727</b>	<b>51,312</b>	<b>57,272</b>	<b>34,077</b>	<b>53,337</b>	<b>66,354</b>
Foreign direct investment in Canada	7,538	7,116	8,847	3,301	5,708	6,125	11,551	14,769	8,726	11,421
Foreign portfolio investment	23,058	23,212	18,584	31,501	24,701	53,058	23,291	23,565	20,033	21,027
Canadian portfolio bonds	16,146	18,187	14,678	28,063	18,766	31,705	15,974	29,061	19,075	10,367
Canadian portfolio stocks	-2,379	3,885	-1,735	-990	1,036	12,056	6,412	-4,242	8,278	7,642
Canadian money market	9,291	1,139	5,642	4,428	4,898	9,296	905	-1,254	-7,320	3,018
Other foreign investment	4	11,554	11,233	-292	-2,682	-7,871	22,429	-4,257	24,578	33,906
Loans	3,089	8,339	2,883	1,641	792	30	253	2,005	9,622	-2,075
Deposits	-4,482	2,389	7,704	-2,268	-4,037	-8,179	20,994	-6,004	16,507	34,258
Other liabilities	1,398	827	647	334	564	278	1,183	-258	-1,551	1,722
<b>Total capital and financial accounts, net flow</b>	<b>17,817</b>	<b>27,617</b>	<b>25,167</b>	<b>25,791</b>	<b>21,890</b>	<b>34,742</b>	<b>18,608</b>	<b>3,329</b>	<b>-6,926</b>	<b>20,632</b>
<b>Statistical discrepancy</b>	<b>511</b>	<b>-1,806</b>	<b>-2,032</b>	<b>-162</b>	<b>3,470</b>	<b>-6,544</b>	<b>1,616</b>	<b>4,277</b>	<b>3,272</b>	<b>-3,646</b>

1. From 1983, includes reinvested earnings accruing to direct investors.

2. A minus sign denotes an outflow of capital resulting from an increase in claims on non-residents or from a decrease in liabilities to non-residents.

Source: Statistics Canada, CANSIM, matrix 2360.

9.7 Canada's International Investment Position<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>Assets</b>	<b>220,272</b>	<b>237,995</b>	<b>263,922</b>	<b>281,902</b>	<b>298,521</b>	<b>326,268</b>	<b>391,686</b>	<b>424,756</b>	<b>486,734</b>	<b>549,789</b>
Canadian direct investment abroad	79,763	89,851	98,402	109,068	111,691	122,427	143,039	161,513	177,031	193,674
Portfolio investment	30,911	36,045	40,194	50,584	57,682	70,437	80,499	82,227	98,343	111,467
Foreign bonds	7,665	9,982	10,177	11,270	12,934	17,501	18,317	18,822	21,263	27,505
Foreign stocks	23,246	26,063	30,017	39,314	44,748	52,936	62,182	63,405	77,080	83,962
Other investments	109,598	112,099	125,326	122,249	129,147	133,403	168,149	181,015	211,361	244,648
Loans	26,664	27,142	25,865	25,621	28,364	30,211	31,208	34,483	39,092	61,096
Allowances	-13,926	-14,446	-12,857	-11,630	-11,878	-12,162	-11,950	-11,792	-11,331	-10,796
Deposits	54,065	55,502	60,101	54,073	57,033	49,112	73,133	78,429	96,975	100,478
Official international reserves	19,317	19,456	21,551	19,530	15,135	16,882	17,487	20,767	28,201	25,704
Other foreign claims	23,479	24,446	30,666	34,656	40,494	49,361	58,271	59,129	58,424	68,167
<b>Liabilities</b>	<b>436,178</b>	<b>470,056</b>	<b>516,428</b>	<b>549,310</b>	<b>596,636</b>	<b>650,007</b>	<b>728,026</b>	<b>761,614</b>	<b>817,854</b>	<b>889,192</b>
Foreign direct investment in Canada	114,175	122,664	130,933	135,234	137,918	141,493	154,327	167,723	174,578	187,586
Portfolio investment	193,641	211,153	235,198	263,734	298,181	353,456	393,168	422,789	443,606	467,579
Canadian bonds	156,114	169,943	188,136	215,555	244,176	284,140	314,879	339,761	356,939	373,180
Canadian stocks	18,110	20,598	20,660	17,644	17,901	23,415	30,760	36,510	47,351	50,579
Canadian money market instruments	19,417	20,611	26,402	30,534	36,104	45,901	47,529	46,519	39,315	43,820
Other investments	128,362	136,239	150,298	150,342	160,537	155,058	180,531	171,101	199,670	234,027
Loans	28,380	35,555	40,063	42,375	48,321	47,588	45,043	43,622	53,915	49,623
Deposits	86,791	86,994	96,099	93,035	96,504	91,379	117,878	109,308	126,837	165,558
Other Canadian liabilities	13,192	13,691	14,136	14,933	15,711	16,091	17,609	18,172	18,919	18,846
<b>Canada's net international investment position</b>	<b>-215,905</b>	<b>-232,061</b>	<b>-252,506</b>	<b>-267,408</b>	<b>-298,114</b>	<b>-323,739</b>	<b>-336,339</b>	<b>-336,858</b>	<b>-331,120</b>	<b>-339,403</b>

1. At year-end.

Source: Statistics Canada, CANSIM, matrix 4180.

9.8 Private and Public Capital Expenditures<sup>1</sup>

	1993	1994	1995	1996	1997	1998
	\$ millions					
<b>Canada</b>	<b>121,253.9</b>	<b>130,131.2</b>	<b>127,802.8</b>	<b>135,271.2</b>	<b>151,792.0</b>	<b>161,161.8</b>
Newfoundland	2,484.7	2,906.4	2,828.7	2,291.6	2,505.1	2,794.7
Prince Edward Island	411.6	483.1	518.8	493.6	489.9	373.7
Nova Scotia	2,924.6	3,049.4	2,913.3	3,020.6	3,769.2	4,057.8
New Brunswick	2,329.1	2,342.8	2,473.2	2,674.9	2,526.2	2,562.6
Quebec	25,691.6	26,688.9	24,857.1	26,306.2	27,845.1	30,172.2
Ontario	43,327.1	45,568.6	45,842.7	50,650.2	56,814.8	59,645.3
Manitoba	3,517.0	3,489.5	3,747.6	4,052.1	4,651.0	4,942.3
Saskatchewan	4,057.6	4,546.5	4,734.4	5,385.5	6,610.0	7,142.6
Alberta	17,918.0	20,025.9	19,927.9	20,798.3	25,797.2	28,325.9
British Columbia	18,005.9	20,402.6	19,226.7	19,013.3	19,956.3	20,219.4
Yukon Territory	190.4	215.3	300.1	202.1	208.3	219.3
Northwest Territories	396.3	412.1	432.3	382.8	618.9	705.9

1. Data for 1998 are revised intentions published on July 23, 1998.

Source: Statistics Canada, CANSIM, matrix 3114.

## 9.9 The Money Market

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$US per \$Canadian													
<b>Exchange rate</b>	<b>0.7722</b>	<b>0.7323</b>	<b>0.7197</b>	<b>0.7542</b>	<b>0.8125</b>	<b>0.8446</b>	<b>0.8571</b>	<b>0.8728</b>	<b>0.8273</b>	<b>0.7751</b>	<b>0.7322</b>	<b>0.7286</b>	<b>0.7334</b>	<b>0.7222</b>
	%													
<b>Selected interest rates</b>														
Bank rate (last Wednesday of the month)	11.31	9.65	9.21	8.40	9.69	12.29	13.04	9.03	6.78	5.09	5.77	7.31	4.53	3.52
Prime business loan rate	12.06	10.58	10.52	9.52	10.83	13.33	14.06	9.94	7.48	5.94	6.88	8.65	6.06	4.96
Chartered bank typical mortgage rate														
1 year	12.00	10.31	10.15	9.85	10.83	12.85	13.40	10.08	7.87	6.91	7.83	8.38	6.19	5.54
3 years	13.21	11.54	10.88	10.69	11.42	12.15	13.38	10.90	8.95	8.10	8.99	8.82	7.33	6.56
5 years	13.58	12.13	11.21	11.17	11.65	12.06	13.35	11.13	9.51	8.78	9.53	9.16	7.92	7.07
Consumer loan rate	13.48	12.42	13.58	12.69	13.52	15.80	16.96	13.52	11.31	10.23	10.85	11.88	9.19	8.75
	\$ millions													
<b>Money Supply (M1)</b>	<b>30,117</b>	<b>31,126</b>	<b>33,469</b>	<b>37,464</b>	<b>39,216</b>	<b>40,296</b>	<b>40,755</b>	<b>41,810</b>	<b>44,327</b>	<b>48,326</b>	<b>54,175</b>	<b>57,118</b>	<b>63,101</b>	<b>72,680</b>

Sources: Statistics Canada, CANSIM, matrices 921, 926 and 2560; Bank of Canada, *Bank of Canada Review*.



**9.10 Consumer Price Index**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
% change in the index from previous year										
<b>All items</b>	<b>4.0</b>	<b>5.0</b>	<b>4.8</b>	<b>5.6</b>	<b>1.5</b>	<b>1.8</b>	<b>0.2</b>	<b>2.2</b>	<b>1.6</b>	<b>1.6</b>
Food	2.7	3.7	4.1	4.8	-0.4	1.7	0.4	2.4	1.3	1.6
Shelter	4.6	5.8	5.6	4.6	1.8	1.4	0.4	1.1	0.2	0.2
Household operations and furnishings	3.8	3.5	2.1	3.9	0.5	1.0	0.2	1.9	2.1	1.2
Clothing and footwear	5.2	4.0	2.8	9.4	0.9	1.0	0.8	-0.1	-0.3	1.3
Transportation	1.9	5.2	5.6	1.8	2.0	3.2	4.5	5.2	3.9	3.1
Health and personal care	4.4	4.3	4.9	7.0	2.2	2.7	0.9	-0.1	0.6	1.7
Recreation, education and reading	5.6	4.6	4.2	6.9	1.1	2.4	3.0	3.8	2.4	2.5
Alcoholic beverages and tobacco products	7.4	9.3	8.8	17.1	5.9	1.6	-16.3	-0.1	2.0	3.1
<b>Special aggregates</b>										
All items excluding food	4.3	5.2	5.0	5.8	1.8	1.9	0.1	2.2	1.6	1.6
All items excluding energy	4.3	5.1	4.5	5.6	1.6	1.9	0.1	2.3	1.5	1.5
Regulated prices	5.0	5.5	5.6	9.7	4.9	3.0	-3.8	1.0	2.5	3.0
Non-regulated prices	3.7	4.8	4.6	4.4	0.5	1.4	1.5	2.6	1.2	1.2

Source: Statistics Canada, CANSIM, matrix 9957.

**9.11 Raw Materials Prices, by Category**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
1992 = 100										
<b>All raw materials</b>	<b>98.2</b>	<b>101.4</b>	<b>105.6</b>	<b>99.0</b>	<b>100.0</b>	<b>105.3</b>	<b>114.7</b>	<b>124.7</b>	<b>129.1</b>	<b>126.9</b>
Vegetable products	117.3	118.8	109.7	97.8	100.0	107.1	129.7	141.8	155.1	146.9
Animals and animal products	95.6	96.9	101.3	100.2	100.0	105.6	103.5	106.3	113.4	115.4
Wood	88.6	89.4	88.9	90.4	100.0	135.8	152.7	166.9	154.7	153.4
Ferrous materials	111.3	107.5	100.0	96.5	100.0	113.4	131.0	137.4	132.7	132.8
Non-ferrous metals	137.5	131.3	118.0	99.5	100.0	94.0	123.7	149.6	128.8	127.0
Non-metallic minerals	102.9	104.2	104.1	104.3	100.0	101.2	103.9	107.5	108.6	112.0
Mineral fuels	83.2	94.2	112.9	102.8	100.0	94.9	96.3	103.3	122.9	118.1

Source: Statistics Canada, CANSIM, matrix 1879.

## 9.12 Industrial Product Prices, by Industry

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1992 = 100									
<b>All manufacturing industries</b>	<b>98.3</b>	<b>100.3</b>	<b>100.6</b>	<b>99.5</b>	<b>100.0</b>	<b>103.6</b>	<b>109.9</b>	<b>118.1</b>	<b>118.6</b>	<b>119.5</b>
Food	94.9	97.0	98.5	98.9	100.0	103.5	107.2	110.2	115.0	117.3
Beverages	87.7	92.8	95.5	98.7	100.0	101.5	102.1	104.4	107.3	110.0
Tobacco products	74.2	77.9	84.1	93.1	100.0	106.5	109.9	113.5	118.3	126.6
Rubber products	93.7	96.5	98.7	99.7	100.0	99.5	102.8	107.8	108.7	109.3
Plastic products	101.1	104.6	103.4	102.1	100.0	99.7	104.3	116.5	114.7	115.0
Leather and allied products	90.1	93.4	96.8	99.1	100.0	101.6	106.0	111.1	114.6	117.7
Primary textiles	97.9	99.8	100.9	100.4	100.0	101.7	103.5	108.9	110.2	111.0
Textile products	95.8	98.2	99.2	100.2	100.0	100.6	103.1	105.9	107.6	108.4
Clothing	93.6	96.0	98.4	99.5	100.0	100.2	101.8	104.5	106.9	107.9
Wood	91.1	94.5	94.0	92.3	100.0	124.5	139.7	134.6	141.9	143.3
Furniture and fixtures	92.1	96.0	99.4	100.4	100.0	102.2	105.0	111.5	112.6	113.4
Paper and allied products	113.4	117.0	115.0	103.9	100.0	97.0	107.8	150.4	132.6	125.3
Printing, publishing and allied products	87.6	92.1	94.9	98.1	100.0	104.7	110.8	125.7	126.5	127.1
Primary metal	125.6	124.2	112.3	102.7	100.0	99.2	117.0	133.9	124.3	126.9
Fabricated metal products (excluding machinery)	96.4	99.2	100.0	100.1	100.0	102.5	107.8	116.5	118.4	119.7
Machinery (excluding electrical machinery)	89.7	93.8	96.2	98.0	100.0	101.7	104.8	109.6	112.9	115.6
Transportation equipment	93.0	92.7	93.3	95.1	100.0	106.8	112.2	115.4	118.6	121.6
Electrical and electronic products	97.0	100.5	100.3	99.7	100.0	103.5	106.7	108.1	106.8	105.8
Non-metallic mineral products	98.5	100.1	101.3	100.6	100.0	100.9	105.0	109.9	111.3	112.0
Refined petroleum and coal products	98.1	99.5	112.3	108.6	100.0	99.0	98.6	104.4	116.2	116.4
Chemical and chemical products	101.1	102.9	100.8	101.5	100.0	101.8	109.1	118.8	116.6	117.2
Other manufacturing industries	94.8	97.0	98.0	99.3	100.0	102.7	108.0	111.0	112.9	113.5

Source: Statistics Canada, CANSIM, matrix 1878.

9.13 International Economic Indicators,<sup>1</sup> 1996

	Growth in real GDP	Unemployment rate	Consumer price inflation	Growth in money supply (M1)	Short-term interest rates	Long-term interest rates	Monetary unit	Exchange rates	Monthly averages	
									Imports	Exports
				%				National currency units per \$US	\$US (billions)	
Canada	1.5	9.7	1.5	17.2	4.4	7.5	\$	1.36	14.24	16.86
Australia	3.3	8.6	2.6	13.6	7.1	8.2	\$A	1.28	5.11	5.02
Austria	..	4.4	1.8	5.1	3.4	5.3	S	10.58	5.61	4.82
Belgium	1.4	9.8	2.1	3.1	3.2	6.3	FB	30.98	13.41	14.19
Denmark	2.7	6.9	2.2	..	3.9	7.1	DKr	5.80	3.75	4.25
Finland	3.3	15.3	0.5	16.3	3.6	6.0	Fmk	4.59	2.58	3.38
France	1.5	12.4	2.0	0.8	3.9	6.5	FF	5.12	22.61	24.04
Germany	1.4	8.9	1.5	11.3	3.3	6.1	DM	1.51	37.98	43.44
Greece	..	..	8.2	12.5	..	..	Dr	240.70	..	..
Iceland	5.3	..	2.3	9.7	7.0	5.6	ISK	66.69	0.17	0.16
Ireland	8.6	11.6	1.8	17.0	5.4	7.5	£ Ir	0.63	2.98	4.03
Italy	0.7	12.0	3.8	3.6	8.8	8.8	Lit	1,543.00	17.24	20.90
Japan	3.5	3.4	0.1	10.2	0.6	3.0	¥	108.80	29.10	34.26
Mexico	5.1	..	34.4	40.6	32.9	..	MN\$	7.60	...	...
Netherlands	3.3	6.3	2.0	12.2	3.0	6.5	f.	1.69	15.05	16.45
New Zealand	2.2	6.1	2.3	12.2	9.3	7.9	NZ\$	1.45	1.22	1.19
Norway	5.3	4.9	1.2	9.3	4.9	6.8	NKr	6.46	2.96	4.13
Portugal	3.0	7.3	3.2	10.8	7.4	8.6	Esc	154.20	2.93	2.05
Spain	2.3	22.1	3.6	6.9	7.5	8.2	Ptas	126.70	10.15	8.51
Sweden	1.3	10.0	0.8	..	5.8	8.0	SKr	6.71	5.57	7.07
Switzerland	-0.2	..	0.8	9.7	1.9	4.0	FS	1.24	6.50	6.63
Turkey	6.9	..	80.3	134.9	..	..	(thousands) LT	81.30	3.59	1.94
United Kingdom	2.3	8.2	2.5	5.3	6.0	7.8	£	0.64	23.92	21.66
United States	2.8	5.4	2.9	-4.2	5.4	6.8	\$US	1.00	66.27	52.09

1. Some adjustments have been made to national statistics by the OECD to improve comparability. Data for Mexico have not been adjusted.

Source: Organization for Economic Co-operation and Development, *Main Economic Indicators*, Paris, 1997.

9.14 Imports of Goods,<sup>1</sup> by Product

	1990	1991	1992	1993	1994	1995	1996	1997	% of 1997 total
	\$ millions								
<b>Imports</b>	<b>140,999.9</b>	<b>140,657.9</b>	<b>154,429.6</b>	<b>177,593.3</b>	<b>208,590.5</b>	<b>231,206.1</b>	<b>239,576.9</b>	<b>278,237.3</b>	<b>100.0</b>
Agricultural and fishing products	8,739.0	9,003.8	9,736.4	11,013.5	12,577.5	13,374.9	14,117.4	15,548.9	5.6
Fruits and vegetables	2,911.7	3,078.5	3,249.2	3,520.5	3,641.7	3,899.5	4,005.9	4,330.4	1.6
Other agricultural and fishing products	5,827.2	5,925.2	6,487.3	7,493.1	8,935.9	9,475.5	10,111.5	11,218.5	4.0
Energy products	8,197.9	6,629.3	6,477.5	6,968.6	6,959.6	7,250.3	9,581.3	10,582.0	3.8
Crude petroleum	5,443.7	4,500.4	4,174.9	4,687.9	4,609.3	4,846.5	6,689.1	7,167.2	2.6
Other energy products	2,754.2	2,128.9	2,302.6	2,280.7	2,350.3	2,403.8	2,892.2	3,414.8	1.2
Forestry products	1,324.0	1,217.5	1,387.5	1,566.3	1,810.1	2,038.2	1,913.1	2,372.3	0.9
Industrial goods and materials	26,325.3	24,687.7	27,278.4	32,162.1	39,186.7	45,574.4	46,507.7	54,339.5	19.5
Metals and metal ores	7,285.4	6,250.9	6,705.1	8,088.0	10,067.7	12,171.4	11,752.4	14,359.8	5.2
Chemical and plastics	8,273.3	8,292.6	9,315.5	11,093.8	13,790.5	16,310.4	17,378.5	19,534.8	7.0
Other industrial goods and materials	10,766.6	10,144.2	11,257.8	12,980.3	15,328.5	17,092.6	17,376.8	20,444.9	7.3
Machinery and equipment	42,917.9	42,885.2	46,674.3	53,095.7	65,717.3	75,646.7	76,612.8	91,117.5	32.7
Industrial and agricultural machinery	12,578.8	11,139.9	11,357.0	13,833.0	18,102.5	20,564.4	19,990.2	25,481.4	9.2
Aircraft and other transportation equipment	5,100.0	5,488.4	5,695.5	5,139.4	5,644.9	7,565.9	8,203.4	10,930.5	3.9
Office machines and equipment	6,280.5	6,910.7	8,004.9	9,271.8	11,410.9	12,861.7	13,372.8	15,060.5	5.4
Other machinery and equipment	18,958.6	19,346.2	21,616.9	24,851.5	30,559.0	34,654.7	35,046.4	39,645.1	14.2
Automotive products	30,479.6	30,961.2	33,679.9	39,943.9	47,835.1	50,100.2	51,379.2	60,599.0	21.8
Passenger autos and chassis	10,608.8	11,532.3	11,538.4	11,698.1	13,444.3	13,075.1	13,803.0	17,658.9	6.3
Trucks and other motor vehicles	3,413.0	3,646.5	3,652.4	4,564.5	6,091.6	6,766.1	7,100.4	8,568.8	3.1
Motor vehicle parts	16,457.8	15,782.4	18,489.1	23,681.3	28,299.2	30,259.0	30,475.8	34,371.3	12.4
Other consumer goods	15,853.5	16,614.7	18,942.8	21,368.0	23,441.3	25,546.8	25,838.1	29,586.3	10.6
Apparel and footwear	3,746.0	3,462.1	3,914.9	4,370.1	4,678.6	5,143.7	4,865.1	5,767.8	2.1
Miscellaneous consumer goods	12,107.5	13,152.6	15,027.9	16,997.9	18,762.7	20,403.1	20,973.0	23,818.5	8.6
Special transactions trade	2,966.3	3,626.2	4,061.2	4,349.2	4,877.0	5,488.8	7,064.6	6,721.6	2.4
Unallocated adjustments	4,196.7	5,031.8	6,191.4	7,125.7	6,185.9	6,185.5	6,562.7	7,370.2	2.6

1. Balance-of-payments basis.

Source: Statistics Canada, CANSIM, matrix 3651.



9.15 Imports and Exports of Goods,<sup>1</sup> by Country

	United States		Japan		EU <sup>2</sup>		Other OECD <sup>3</sup>		Other countries <sup>4</sup>	
	\$ millions	%	\$ millions	%	\$ millions	%	\$ millions	%	\$ millions	%
<b>Imports</b>										
1991	97,577.7	69.4	8,748.5	6.2	14,506.7	10.3	4,550.4	3.2	15,274.5	10.9
1992	110,378.5	71.5	8,913.3	5.8	13,923.2	9.0	4,615.8	3.0	16,598.7	10.7
1993	130,714.3	73.6	8,477.4	4.8	14,026.4	7.9	4,683.9	2.6	19,691.1	11.1
1994	156,342.0	75.0	8,318.0	4.0	16,420.3	7.9	7,376.6	3.5	20,133.5	9.7
1995	173,725.9	75.1	8,429.9	3.6	20,349.0	8.8	7,939.3	3.4	20,762.1	9.0
1996	181,893.1	75.9	7,235.7	3.0	20,617.2	8.6	8,950.7	3.7	20,880.2	8.7
1997	212,214.1	76.3	8,692.9	3.1	24,163.7	8.7	11,341.4	4.1	21,825.2	7.8
<b>Exports</b>										
1991	108,615.5	73.6	7,644.2	5.2	12,584.0	8.5	2,744.2	1.9	16,081.5	10.9
1992	123,376.9	75.5	8,253.7	5.0	12,776.5	7.8	3,178.6	1.9	15,877.8	9.7
1993	149,006.2	78.3	9,140.9	4.8	12,066.4	6.3	3,380.2	1.8	16,789.7	8.8
1994	180,836.9	79.4	10,733.7	4.7	12,871.3	5.6	4,640.4	2.0	18,809.8	8.3
1995	205,852.8	77.7	13,069.9	4.9	17,914.7	6.8	4,839.5	1.8	23,260.9	8.8
1996	221,854.7	79.1	12,490.3	4.5	17,370.0	6.2	5,403.2	1.9	23,448.1	8.4
1997	244,120.6	80.9	12,068.9	4.0	16,598.8	5.5	8,264.8	2.7	20,547.6	6.8

1. Balance-of-payments basis.

2. European Union.

3. Organisation for Economic Co-operation and Development excluding the United States, Japan, and EU countries.

4. Countries not included in the EU or the OECD.

Source: Statistics Canada, CANSIM, matrix 3685.

9.16 Imports and Exports of Goods<sup>1</sup>

	Imports		Exports		Trade balance
	Value	Change from previous year	Value	Change from previous year	
	\$ millions	%	\$ millions	%	\$ millions
1990	140,999.9	1.3	152,055.5	3.5	11,055.6
1991	140,657.9	-0.2	147,669.4	-2.9	7,011.5
1992	154,429.6	9.8	163,463.5	10.7	9,033.9
1993	177,593.3	15.0	190,383.4	16.5	12,790.1
1994	208,590.5	17.5	227,892.0	19.7	19,301.5
1995	231,206.1	10.8	264,937.9	16.3	33,731.8
1996	239,576.9	3.6	280,566.3	5.9	40,989.4
1997	278,237.3	16.1	301,600.7	7.5	23,363.4

1. Balance-of-payments basis.

Source: Statistics Canada, CANSIM, matrix 3685.

9.17 Exports of Goods,<sup>1</sup> by Product

	1990	1991	1992	1993	1994	1995	1996	1997	% of 1997 total
	\$ millions								
<b>Exports</b>	<b>152,055.5</b>	<b>147,669.4</b>	<b>163,463.5</b>	<b>190,383.4</b>	<b>227,892.0</b>	<b>264,937.9</b>	<b>280,566.3</b>	<b>301,600.7</b>	<b>100.0</b>
Agricultural and fishing products	13,317.7	13,118.6	15,338.7	16,394.5	18,876.6	20,984.0	24,436.6	24,624.2	8.2
Wheat	3,231.7	3,203.8	3,835.8	3,192.4	3,549.6	4,445.2	5,512.9	5,102.3	1.7
Other agricultural and fishing products	10,086.0	9,914.8	11,502.9	13,202.1	15,327.0	16,538.8	18,923.7	19,521.9	6.5
Energy products	13,961.1	14,109.5	15,451.9	17,789.4	19,175.6	20,296.4	25,558.3	27,871.7	9.2
Crude petroleum	5,457.3	5,172.4	5,885.3	6,222.5	6,507.1	8,184.2	9,854.4	10,198.0	3.4
Natural gas	3,278.6	3,657.4	4,730.1	5,643.4	6,127.8	4,966.0	6,671.1	8,564.5	2.8
Other energy products	5,225.2	5,279.7	4,836.5	5,923.5	6,540.7	7,146.2	9,032.8	9,109.2	3.0
Forestry products	20,335.9	18,597.9	20,017.0	23,519.0	28,912.9	36,875.1	34,587.4	34,942.5	11.6
Lumber and sawmill products	6,811.6	6,400.2	8,271.0	11,524.2	13,963.5	13,958.3	15,782.5	16,692.4	5.5
Woodpulp and other wood products	5,925.1	4,807.0	4,721.5	4,211.8	5,910.5	9,767.6	6,281.6	6,204.8	2.1
Newsprint and other paper and paperboard	7,599.2	7,390.7	7,024.5	7,783.0	9,038.9	13,149.2	12,523.3	12,045.3	4.0
Industrial goods and materials	32,127.8	31,251.9	32,380.4	35,172.3	42,386.6	50,619.6	52,086.5	55,432.1	18.4
Metals and metal ores	5,203.8	4,457.8	4,358.6	3,891.5	4,277.9	5,737.4	5,788.9	5,851.7	1.9
Chemicals, plastics and fertilizers	8,016.9	7,704.5	8,551.7	9,329.8	11,906.6	15,091.1	15,342.9	17,032.4	5.6
Metals and alloys	13,070.1	13,635.9	13,418.4	14,997.8	17,477.0	19,360.8	19,708.2	19,926.8	6.6
Other industrial goods and materials	5,837.0	5,453.7	6,051.7	6,953.2	8,725.1	10,430.3	11,246.5	12,621.2	4.2
Machinery and equipment	28,854.4	29,294.0	31,893.1	36,847.9	46,571.4	56,704.5	62,241.0	67,527.8	22.4
Industrial and agricultural machinery	6,159.5	5,870.5	6,356.7	7,827.8	10,678.1	12,976.1	13,523.7	14,682.7	4.9
Aircraft and other transportation equipment	6,716.8	7,120.1	6,772.1	7,579.2	8,742.7	10,660.4	12,453.1	12,653.6	4.2
Other machinery and equipment	15,978.1	16,303.4	18,764.3	21,440.9	27,150.6	33,068.0	36,264.2	40,191.5	13.3
Automotive products	34,676.9	32,494.6	38,101.1	48,609.0	57,608.3	62,878.5	63,357.2	70,029.2	23.2
Passenger autos and chassis	15,862.3	15,628.9	17,265.4	24,138.4	30,266.5	34,428.5	33,736.3	36,541.0	12.1
Trucks and other motor vehicles	8,144.5	7,669.2	10,041.3	11,467.9	12,077.1	12,562.0	12,466.4	14,522.9	4.8
Motor vehicle parts	10,670.1	9,196.5	10,794.4	13,002.7	15,264.7	15,888.0	17,154.5	18,965.3	6.3
Other consumer goods	3,347.7	3,474.4	4,469.1	5,607.9	7,101.8	8,306.7	9,497.4	10,674.2	3.5
Special transactions trade	1,714.2	1,656.5	1,835.7	2,164.9	2,564.1	2,864.6	3,154.0	4,061.5	1.3
Unallocated adjustments	3,719.7	3,672.2	3,976.6	4,278.4	4,695.1	5,408.5	5,647.4	6,437.8	2.1

1. Balance-of-payments basis.

Source: Statistics Canada, CANSIM, matrix 3685.





## *Primary Industries*

### **C h a p t e r**

*For most Canadians, the rhythms and labours of our primary industries are far from us. Not many of us know the farmer's argument with sun, rain, snow or hail. Fewer know the sound of chainsaws felling timber or the crash of waves beneath an offshore oil rig, and if we do, we know them by the TV clip.*

*Although the primary industries—farming, trapping, logging, mining, and oil and gas well*



drilling—form a distinctive part of our economy, their relative contribution to Canada's economic output is declining. Mainly this is due to greater growth in other sectors, but also to our exploitation of natural resources which has, in some cases, curtailed or even reversed growth.

The collapse of the North Atlantic cod fishery in the early 1990s is one case in point. On the West Coast, diminishing catches and the failure of Canada and the United States to agree on salmon quotas are warnings that a similar fate could be in store for the Pacific salmon.

Market conditions have limited growth in the trapping industry. In recent years, Canadian fur trappers have had to contend with a European boycott of seal-pup furs and an anti-trapping lobby, but Canadian fur sales have suffered most from volatile prices in an unpredictable international market.

Canada is one of the world's foremost mineral exporters, and new discoveries, such as the nickel-copper-cobalt deposits of Newfoundland's

Voisey's Bay, are maintaining that position. Increasingly, however, Canadians want a say in the way these resources are harvested. In 1997, for example, mining activity at Voisey's Bay was on hold while experts looked at the impact of the mine on the surrounding land and ecosystem.

## Foundations

Although the importance of primary industries to Canadian economic activity is now declining, Canada's prosperity is deeply rooted in the rich resources of the land and the sea. In fact, the primary industries were the driving force behind both the settlement and development of Canada. Five hundred years ago, European fishermen sailed to what would be Canada's Atlantic shores to catch the then-teeming seas of cod. In the 17th and 18th centuries, rival fur traders explored river routes into the vast interior, in part to sustain a penchant in London and Paris for fur hats.

In the first half of the 19th century, Canadian forests supplied wood to build Europe's merchant fleets, bringing prosperity to Eastern Canada. In the late 1900s, a huge farming industry grew up on the rich lands of the western prairies and in southern Ontario. Wheat, as much as cross-ties and steel, laid the tracks for the transcontinental railway. In the early 20th century, metal mining on the ancient rock of the Canadian Shield developed as another resource industry.

As recently as the early 1960s, the primary industries contributed a robust 12% of Canada's real gross domestic product (GDP is the value of all goods and services produced in Canada); in 1996, this had fallen to 7%.

Between 1981 and 1996, Canada's GDP grew at an average rate of 2% a year. Of the primary industries, only the mining, quarrying and oil-well sector performed better than the economy as a whole, with its GDP growing at 4% a year.

The logging and forestry sector is still struggling to recover from the recession of 1990–91. Its output peaked in 1989 at \$3.5 billion, and only in

Canadian Harvesting Scene, showing immense yield of wheat



Scene from a wheat field, early 1900s (further details, see Appendix C).

1996 did it regain a semblance of its pre-recession value (86%).

In fact, the importance of all goods-producing industries, including manufacturing, is declining in most industrialized countries. In spite of this, the primary industries and the natural resources they exploit are one of the best guarantees for a long and prosperous future. Canada's rich resources, together with a relatively small population, are the main reasons why the average Canadian is the second-richest person in the world.

### **Jobs and Income**

The number of Canadians working in the primary industries has represented a shrinking slice of the ever-increasing work force. In 1977, jobs in primary industries accounted for 7.2% of all jobs. By 1987, the proportion had dropped to 6%, and in 1996, to 5.4%. (About 730,000 Canadians worked in primary industries in 1996.)

In terms of income, the highest-paid workers are to be found in the mining, quarrying and oil-well sector. In 1996, full-time workers in this sector earned an average weekly wage of \$1,039, compared with the overall industry average of \$586. Loggers and forestry workers earned \$769, while fishers, trappers and farm workers earned less than the average. In 1995, more than half the earnings of farm operators with farm revenues greater than \$10,000 came from other sources, such as off-site farm work, investments or pensions.

### **AGRICULTURE**

Over the past century, a mix of social change, technology and market forces has dramatically altered life on Canada's farms. In 1941, some 3.3 million people, then 27% of Canada's population, lived on the farm. In 1996, this had dropped to only 267,000 people, or 2% of the working population. In 1941, the number of farms was more than 730,000; in 1996, there were only

280,000. In 1901, the average farm was 50 hectares; in 1996, it was 246.

Once a mainstay of Canada's economic health and security, farming generated \$12 billion in 1996, but represented just 2% of the country's GDP. Agriculture is still very important to some regional economies. For example, wheat alone makes up about 11% of Saskatchewan's GDP in a normal year—even more if wheat prices are high.

In Canada, only 7% of the country is farmland, most of which is to be found in two regions. There is a table of dry, interior grassland in the southern half of the Prairie provinces, and there is a belt of humid, forest lowlands that runs diagonally inland along the St. Lawrence waterway down to the shores of the eastern Great Lakes. While there are notable pockets of arable land elsewhere, rock, mountain, and cold leave much of the country unfenced and unfarmed.



Leo Weza, retired farmer, Lipton, Saskatchewan.

Photo by George Webber





Work by Conrad Furey, Carleton University Art Gallery (further details, see Appendix C)

**Man in Boat, 1985**

## Crops and Livestock

The leading field crop in Canada is wheat. In 1992, some 14.4 million hectares were seeded with wheat. But in 1997 came the end to almost 100 years of Crow Rates—the federal government's transportation subsidy to Western grain farmers. Since farmers must now pay the full cost of shipping grain to market, they have begun moving into crops and livestock that bring greater profits.

The move to canola in particular has been one of the major stories in Canadian agriculture in the late 1980s and early 1990s. Between 1989 and 1994, for example, the area seeded to canola almost doubled. In 1996, however, as wheat prices rose, many western producers again expanded wheat production while sharply reducing seeding of canola.

Canadian potato production is at a record high. Canadian farmers grew more than 4 million tonnes in 1997, up from 3 million in 1990. Some of this increase is due to domestic demand (perhaps even to our affinity for French fries), but it is mainly driven by a strong export market: during the 1990s, there has been a 39% increase in the amount of potatoes grown in Canada; in the same time span there has been an 81% increase in export demand for these potatoes.

Similarly, the Canadian beef industry is finding a strong export market, which more than compensates for a relatively flat domestic demand. According to the 1996 Census of Agriculture, there were 4.7 million cows in Canada—a 22% increase since the previous census in 1991. These breeding stocks in turn produced almost 9 million head of cattle destined to become beef.

Cattle herds have grown slightly over the last 25 years: from 12 million in 1971 to 15 million in 1996. Yet while the beef market booms, dairy cow numbers have been in decline. The 1996 Census recorded just over 1.2 million dairy cows, a 6.6% drop from 1991.

Despite these dwindling numbers, milk production has remained



*Detail of a photo by Malak*

**Sheep at the Central Experimental Farm, Ottawa.**



## What's Cooking?

*In 1875, when an English woman learned her dear friend Samuel Butler, a representative of the English stockholders in the Canada Tanning Extract Company, might have to extend his trip to Montréal, she warned him that he might “be killed by bad cooking.”*

*Just before the turn of the century, a physician named Ezra Hurlburt Stafford wrote in The Dominion Medical Monthly and Ontario Medical Journal of Canadian eating habits. Tongue no doubt in cheek, he wrote, “Space is lacking here to go in detail into the abominations of Canadian cookery. With the most bountiful supply of provisions the culinary art is wholly neglected, and scarcely understood at all.”*

*Since Butler's descriptions of Canadian cuisine were quite frightening, Year Book editors chose not to reprint them. Suffice it to say, Butler's version of pemmican bears no resemblance to that extolled by explorers and Aboriginal peoples alike.*

constant. Increased production per dairy cow has been achieved through improved breeding, feeding and milking techniques. While the number of dairy cattle fell, herd sizes rose, on average, from 34 cows per farm in 1991 to 40 in 1996. Ontario and Quebec dominate the Canadian dairy industry, sharing just over 70% of all dairy cows.

Canada's hens are working harder, even though the number that lay eggs is down. For example, in 1980, there were 25 million “layers” in Canada: they laid 495 million dozen eggs, averaging 236 eggs per bird in that year. In 1997, there were almost 22 million birds laying 498 million dozen eggs, an average of 272 eggs per laying hen for the year. Interestingly, there has actually been an increase in hen flocks, but it appears that more of them are being shipped to market. For example, in 1976, the hen population was 87 million, reaching 93 million in 1981. In 1996, there were 102 million hens and chickens, two-thirds of them in Eastern Canada.

## Farmers

In Canada, the vast majority of farmers own at least part of their land and the average farm is worth about half a million dollars. In 1996, the full worth of all land, livestock, buildings and machinery was \$156 billion, which is 20% more than in 1991. Outstanding debt, on the other hand, comprised about one-sixth of this capital. Purchases of land, equipment, and quotas, and construction and renovation of buildings on Canadian farms came to about \$7.6 billion in 1995.

Between 1991 and 1996, the number of Canadian farm operators—those responsible for the day-to-day management of a farm—dropped about 1.3% to 385,610. This mirrored the decrease in the number of farms (1.2%). In 1996, women accounted for a little more than 25% of all farm operators, virtually unchanged from 1991.

On average, Canadian farmers depend on outside sources (such as working off the farm or running another business on the farm) for more than half their income. In 1995, the average net operating farm income was \$14,500, while off-farm incomes averaged just under \$18,000.

## FISHING AND TRAPPING

Commercial fishing and fur trapping make a modest contribution to the overall Canadian economy, yet they continue to be important regionally: in coastal areas and in the North. In 1996, they generated \$786 million or about 0.1% of GDP, down substantially from a 35-year high of \$1.1 billion set in 1990, which was 0.2% of GDP. Their historic decline in economic importance is largely the result of the expansion of other sectors of the economy, but more recently new developments have curtailed activity in these two industries.

Throughout the 1980s, employment in fishing and trapping rose, reaching a high of 47,600 in 1991 (the year of the cod moratorium). From 1991 to 1997, however, this sector lost some 10,000 jobs.

The United Nations Food and Agricultural Organization estimates that catches of 70% of the world's marine fish species have reached or exceeded sustainable levels. In 1992, with the collapse of our own groundfish stocks, such as cod, haddock and pollock, Canada has had to face up to this sobering statistic.

The declines in fish catches have been offset by rising fish prices. In 1988, the fish catch peaked at 1.7 million tonnes and was valued at \$1.6 million. In 1995, it dropped to 880,000 tonnes, but fetched \$1.8 million. Stocks of shellfish (including lobster, crab and shrimp) increased, and higher catches were landed. In fact, shellfish catches increased a record amount of about 160,000 tonnes in 1995, bringing the total that year to 100,000 tonnes more than the total catch in 1987.

*Moreover, although Canadians may not have been renowned for their culinary or eating habits in the early decades of this country, certainly this cannot be said of today's health-conscious population.*

*More and more of us are guided by what Health Canada considers good food choices. In the last two decades, for example, we have increased consumption of vegetables by some 22% and of fruit by 17%. Fish and shellfish are also more frequently on the Canadian menu. In 1996, Canadians averaged about 9 kilograms of fish, up from 7 kilograms in 1991.*

*In 1996, the average Canadian consumed almost 180 kilograms of vegetables and 120 kilograms of fruit. Fresh varieties were the clear preference. In terms of vegetables, the most popular choices were potatoes (70 kilograms per person), lettuce, carrots, onions, tomatoes and cabbage.*

## *H e r d   o f   t h e   L l a m a s ?*

*More unusual creatures are grazing on Canadian farms than ever before. Since the early 1980s, more elks, emus, ostriches and wild boars can be found across the country. Today, Canadian farmers are tending more than 100 species of exotic creatures in response to changes in the export climate and consumer preferences at home.*

*Take, for example, the llama. British author Hilaire Belloc once described this creature as a “woolly sort of fleecy hairy goat, with an indolent expression and an undulating throat.” In 1996, nearly 9,000 of*

*these “fleecy goats” were being raised in Canada, up fourfold since 1991. Most live on western farms and, in addition to being raised as pets, they also make good sheep guards and provide wool. Llamas have even been used on golf courses as a novel way to transport golf bags, in line with their traditional use as pack animals and beasts of burden.*

*Another popular animal is the once-nearly-extinct bison. Two hundred years ago, more than 50 million prairie bison are believed to have roamed North American*

*plains until overzealous hunters virtually wiped them out. Recently, the Canadian bison herd has begun increasing. Between 1991 and 1996, their numbers tripled to 45,000, about half of which were in Alberta. The average adult male weighs in at 840 kilograms, making it North America's largest land mammal.*

*In 1996, deer and elk, raised for their meat, hides and velvet (covering the antlers), were reported for the first time in the Census of Agriculture. The census reported nearly 70,000 deer and elk living*

*on Canadian farms. Some Asian cultures use deer velvet in health products and tea, believing it maintains strength, energy and good health. Antlers from just one mature elk bull can bring in more than \$500.*

*The reindeer industry, which began as a government project for Aboriginal peoples earlier this century, provides meat and antlers and responds to a Santa and pet market. The largest Canadian reindeer herd*

*of 14,000 is concentrated in Tuktoyaktuk in the Northwest Territories.*

*Goats and wild boars are other examples of the trend to non-traditional livestock. In 1996, goats, raised for meat and milk, numbered nearly 126,000, some 43% more than five years earlier and nearly 300 Canadian farms reported more than 37,000 wild boars.*

*Ostrich farming in Canada took hold about 10 years ago. Now, Canadian farmers tend an estimated 15,500 of these largest of living birds and about 60,000 emus, which are related to the ostrich and native to Australia. The rhea, from South America, has also joined its ostrich relatives on Canadian farms. All three are raised for their low-fat meat, leather, oil and feathers.*



## Fur Retail

In 1851, when Canada printed its first stamp, the Three Pence Beaver, it was readily acknowledged that the country owed a great debt to this woodland dam-builder and to the early fur trade it had supported. Luckily for the beaver, around this time, Europeans switched their fashion predilections from fur hats to silk hats, halting a rapid decline in Canada's beaver population.



Photo by Janice Lang

Thelma Lang of Quebec.

Through most of the 1980s, annual wild fur production was about 3 million pelts, but from 1988 to 1992, it dropped to 817,000. Production in the mid-1990s has increased marginally. There are more than 20 varieties of wild pelts, but beaver is still the mainstay: 241,000 pelts in the 1995–96 season. Only pelts from the much smaller, related species, muskrat, exceeded beaver pelts in number, while furs from the marten accounted for the third highest number of pelts.

Throughout the 1980s, fur-ranch production in Canada averaged a fairly steady 1.5 million pelts a year, but in the 1990s has averaged less than 1 million. Mink and fox are the most common species raised on fur ranches.

Today, fashion tastes continue to be fickle. The history of fur retail has been very cyclical. In the early 1990s, Europe's boycott of seal-pup furs and anti-fur lobbying reduced the market for furs. But in the fall of 1997, when European fashion designers presented fur as a part of their showings, it was suddenly back in fashion and there was an upsurge in demand. The value of shipments of finished fur has shown a steady increase; latest available figures are \$87.5 million in 1994, \$88.6 million in 1995 and \$98.5 million in 1996.

## MINING AND QUARRYING

Canada's Aboriginal peoples were making tools and weapons from copper in the central Arctic and on the north shore of Lake Superior long before European settlers arrived, and Canada was associated with minerals in the earliest reports from the New World. Rock crystals found near present-day Québec had Jacques Cartier fooled in 1535, leading to the tag "as false as a Canadian diamond."

Today, some 60 minerals are mined commercially in Canada. In 1994, Canada was the world's largest producer of zinc, potash and uranium, and the second largest producer of sulphur, asbestos, cadmium and nickel.

Together with the Russian Federation, we account for about 50% of the world's nickel production. We are the third largest producer of aluminium, gypsum, copper, platinum group metals, and titanium concentrates, and the fourth largest producer of cobalt, gold and molybdenum. In lead production, we rank fifth and with these abundant resources, it is not surprising that Canada is one of the leading exporters of non-fuel minerals and mineral products. Almost 80% of our minerals and mineral products are shipped to other parts of the world. The United States is a principal market, purchasing about 80% of what we export, while the European Union and Japan buy close to 11%.

### Exploration

The 1992 discovery of distinctive, pipe-shaped, diamond-bearing ore bodies, called kimberlites, at Lac du Gras, Northwest Territories, has sparked an unprecedented exploration rush across Canada's North. Several finds are expected to join the select club of the world's richest diamond mines. A similar exploration rush followed the 1994 base metal discovery in Voisey's Bay, Labrador. In 1995, gold, followed by base metals, diamonds, and uranium were the top exploration targets.

Canada's first diamond mine is scheduled to begin production in late 1998, and the impressive rate of diamond discoveries in the last few years suggests that Canada's North may become one of the world's major diamond fields. Recent large uranium finds at Saskatchewan's Cigar Lake and McArthur River will certainly maintain Canada's role as the world's premier supplier of this radioactive material.

In 1996, there were nearly 300 metal, non-metal and coal mines in Canada. Among the close to 100 metal mines, gold mines were the most numerous, representing about half the total, followed by copper and copper-zinc mines, which compose about one-fifth. There were some 3,000 stone quarries and sand and gravel pits operating in Canada.



*Work by Prudence Heward, National Gallery of Canada*

### ***Rollande***



Diamonds may be forever, but mines are not. The vitality of the mining industry must be maintained by continuous exploration and discovery. Exploration activity bottomed out somewhat in 1992, but revived again in the late-1990s. For 1997, anticipated exploration expenditures

totalled \$876 million, compared with actual expenditures in 1992 of \$385 million.

Meanwhile, the number of jobs lost through mine closings and employee reductions has exceeded the number created by the opening of new mines. From 1981 to 1996, employment dropped 58% to 59,000 workers. In 1996, 20 mines opened or reopened; 17 closed or suspended operations.

## CRUDE PETROLEUM AND NATURAL GAS

Rock oil, Latinized as *petra oleum*, was a popular, patent cure-all tonic in both Canada and the United States in the late 1800s. The notion that what tastes bad is curative appears to have bestowed some credibility on this uncommon substance that seeped up in places from the ground.

But petroleum did not give up its secrets easily. It wasn't until 1821 that natural gas made Fredonia, New York, the best lit city in the world. A way of distilling lamp oil (or kerosene) from petroleum led to Canada's first oil boom in southwestern Ontario in the mid-1800s, but again it was not until the early 1900s, when the gasoline engine was adapted to the motor car, that petroleum's power was fully revealed.

Ironically, its dark beginnings may have foretold the relationship we have with it today: petroleum is the fossil fuel that, above all, controls both our economic and environmental destinies.

Petroleum is refined from either crude oil pumped up from oil wells or from bitumen—an almost solid form of petroleum—occurring in oil sands, where it is mixed with water, clay and sand. Natural gas frequently occurs with oil deposits; in the past, it was burnt off prior to the crude oil being pumped out. Nowadays, natural gas is collected and pumped from Western Canada to homes throughout the country, where it powers furnaces and provides an alternative to electricity for the cooking stove.



Work by Agnes Teenar, The Marion Scott Gallery (private collection, Vancouver, B.C.)

Wall hanging (composition), syllabics, Whale Cove, N.W.T., 1991

Nearly three-quarters of Canada's energy consumption is supplied by burning the three fossil fuels (petroleum, natural gas and coal) which are derived from the remains of ancient plants and animals.

Canada is petroleum self-sufficient. While we import some through our eastern ports, we export a similar volume from western oil fields to the industrial centres of the American mid-west. Ranked as the world's eleventh largest oil-producing nation, Canada produced nearly 30% more in 1996 than in 1989. Crude petroleum output in 1996 was 740 million barrels, more than three-quarters of it from Alberta oil wells and oil sands. Saskatchewan added a further 16%; remaining production was scattered among Nova Scotia, Ontario, Manitoba, British Columbia and the Northwest Territories.

The first major oil discovery, called Leduc Number 1, took place in Alberta in 1947. It marked the beginning of the petroleum industry in that province. Since the Second World War, oil exploration has contributed significantly to Canada's economy. Exploration expenditures peaked in 1985 at \$5.7 billion and in 1992, in the wake of recession, dropped to \$1.7 billion. More recently, they have once again begun increasing.

In fact, a new oil baron is set to redraw the country's oil map. In November of 1997, a full 18 years after the discovery of the oil field it is named after, the towering Hibernia offshore oil platform began to pump its first barrels of oil off Newfoundland's east coast. As early as 2004, Hibernia and two other offshore oil platforms on the Grand Banks are expected to be fully operational and producing 400,000 barrels of crude oil a day. Typically, Canada produces about 2 million barrels a day.

Canada is the world's third largest producer of natural gas, after the United States and the Russian Federation. From 1989 to 1996, natural gas production rose nearly 60% to 153 billion cubic metres. In 1996, Alberta supplied 83% of the total production; British Columbia followed with 12%, and Saskatchewan with 4%.

## *O f L a n d a n d S k y*

*"Here was the least common denominator of nature, the skeleton requirements simply, of land and sky—Saskatchewan prairie. It lay wide around the town, stretching tan to the far line of the sky, shimmering under the June sun and waiting for the unfailing visitation of wind, gentle at first, barely stroking the long grasses and giving them life ...*

*Over the prairie, cattle stood listless beside the dried-up slough beds which held no water for them. Where the snow-white of alkali edged the course of the river, a thin trickle of water made its way toward the town low upon the horizon. Silver willow, heavy with dust, grew along the riverbanks, perfuming the air with its honey smell."*

*W. O. Mitchell, award-winning novelist, playwright, short-story writer and raconteur, wrote extensively about the prairies where he was born, in 1914, and died, in 1998. In Who Has Seen the Wind, Mitchell tells the story of a young boy growing up on the windswept Saskatchewan prairie during the Great Depression.*



Surprisingly, this has not meant more jobs. If anything, it's been the reverse. Over the previous six years, the number of people directly employed in the industry has declined 15%. In 1996, the oil and gas industry employed 1.4% of the total industrial employment of close to 11 million people. If jobs are scarce, however, wages are good. In 1996, the average weekly paycheque was \$1,243, or more than twice the industry average.

### **Crude Oil and Natural Gas Reserves**

In 1996, estimated petroleum reserves in Canada were close to 9 billion barrels, almost three-quarters of which were in Alberta. Over the past two decades, discoveries of crude oil have roughly balanced crude oil production, but light crude oil reserves in Alberta have been drawn down to less than half what they were 20 years ago.

Newly proven reserves in the Far North, the east coast offshore, and bitumen (tar-like petroleum mixed with sand and water) deposits in Alberta have made up for declines in Canada's oil heartland. The National Energy Board forecasts that the supply of conventional light crude oil from Alberta and Saskatchewan will decline from 895,000 barrels a day in 1990 to just 95,000 barrels a day by 2010.

Alberta's oil patch is not about to run dry, however, thanks to the accelerated development of its sprawling oil-sand deposits. Covering an area larger than New Brunswick, these deposits hold an estimated 1.7 trillion barrels of oil, twice the known reserves of Saudi Arabia. Conventional technology can recover only about 300 billion barrels. From 1986 to 1996, oil-sand production rose from 60 to 100 million barrels a year at the open-pit operation in Fort McMurray.

Over the past decade, reserves of natural gas have declined steeply, from 2.8 trillion cubic metres in 1986 to 1.9 trillion in 1996. The production life of this reserve is estimated to be 13 years and there is a high probability

of additional discoveries. Some four-fifths of present reserves are in Alberta, but Sable Island offshore fields on the East Coast are expected to become another significant centre of natural gas production by 1999.

### **LOGGING AND FORESTRY**

From the black spruce stands of Newfoundland to the rain forest giants of British Columbia (the Douglas fir, hemlock and western red cedar), Canada is a nation of forests. Nearly half the land is forest and there are 165 kinds of trees. These forests moderate our climate, cleanse the water, and shelter some 200,000 plant and animal species. Together they make up 10% of the globe's forest cover.

"Canada is the scent of pines. I left my land and returned to know this and become Canadian," wrote poet Milton Acorn, adopting a forest metaphor to capture a feeling shared by many Canadians about our trees. In Canada, forests are so omnipresent, they are a part of our national psyche.

Not surprisingly, with this wealth of trees, logging and forestry is a significant and widespread industry in Canada. In 1996, logging and forestry made a direct contribution of \$3 billion to Canada's GDP. Moreover, logging and forestry provide the essential raw materials to Canada's world-class lumber, wood pulp, and newsprint manufacturing industries.

In 1995, Canada produced more than 188 million cubic metres of roundwood (the technical term for short and long sections of harvested trees). The different woods in this total served different purposes: nearly 149 million cubic metres of logs and bolts (short lengths of roundwood) were destined for lumber and shingles (enough to build 3 million homes); 31 million cubic metres of pulpwood were to be used primarily for newsprint and other papers; and small amounts of other woods were earmarked for lumber and fuel.

While all provinces and territories harvest trees, British Columbia's production towers above the rest. In 1995, the West Coast province had an

output of 74 million cubic metres of roundwood: 40% of the national total. The next largest producer was Quebec with 41 million cubic metres, followed by Ontario (26 million) and Alberta (20 million). British Columbia produced half of the wood used for lumber, and Ontario was the leading producer of pulpwood, cutting one-fourth of the country's total. Quebec and Alberta were other top pulpwood producers.

International trade is very important to the logging and forestry sector, even though very little raw wood is exported. It is the products made from wood, such as lumber, wood pulp, and paper, that are exported. More than half of Canada's forest products are exported, principally to the United States.

Over the decade ending in 1996, employment in the logging sector increased only slightly, while employment in forestry increased at an average annual rate of 2.6%. In 1996, just fewer than 66,000 people worked in the two industries. Almost half the employment was in British Columbia, while Quebec accounted for close to 25%. In 1996, the average weekly wage in the logging industry was \$769, compared with an average industrial wage of \$586.

## Forest Ecology

Public concern over the methods and extent of logging, a notable example of which is the Clayoquot Sound protests of the 1990s, has placed the issues of sustainable forestry production and multiple-use forest management high up on government agendas. In current forest-use debate, a multiplicity of values is being advanced. They extend to aesthetic appreciation, outdoor recreation, wildlife preservation, maintenance of natural ecosystems, the preservation of forest diversity and antiquity, and timber harvest.

A crucial factor is what is referred to as the "annual allowable cut," which is the amount of timber that may be cut in a given year. In 1995, the annual ceiling was set at 233 million cubic metres. The portion of the

allowable cut that forest companies have actually harvested has risen steadily over the past quarter-century. In 1970, it was just over 100 million cubic metres; in 1995, it was 176 million cubic metres. The softwood harvest now almost equals the annual allowable cut for softwood, while the hardwood harvest is about half of its annual allowable cut.

In 1995, about 1 million hectares were cut, 86% by clear-cut methods. About a third of the cut area was in Quebec, while Ontario and British Columbia each cut about one-fifth of the total area. In the same year, roughly 300,000 hectares of harvested land were prepared for regeneration, and more than 400,000 hectares were replanted.



*Work by Sybil Andrews, The Art Gallery of Greater Victoria*

***Hauling, ca. 1950***

## Primary industries now contribute less to GDP



Source: Statistics Canada, CANSIM matrix 4670.

Forest fires and forest fire suppression have complex effects on forests. While fires destroy trees, some fires rejuvenate forest growth, or enlarge the habitat for wildlife. In 1989, Canada recorded its worst year of fire loss: more than 12,000 fires destroyed 7.6 million hectares of forest land. In 1994 and 1995, forests suffered almost as much damage, with a combined loss of 12.7 million hectares from 18,000 fires.

The outcome of major forest fires is often decided by the weather, not people, but Canada has developed sophisticated fire-sensing, and aerial and ground firefighting techniques. Long-term suppression of forest fires, however, allows forest fuels to accumulate—increasing the risk that a runaway fire will burn with increased fury.

Forest management expenditures by government and industry have increased quite significantly over the past two decades, from about \$600 million in 1977 to nearly \$3 billion in 1995. What government and industry spend is roughly equal and goes to enhance tree growth, protect forests from fire and disease, build access roads, and conduct forest and timber management studies and research.



## SOURCES

Agriculture and Agri-Food Canada  
Canadian Heritage  
Department of Fisheries and Oceans  
National Energy Board  
Natural Resources Canada  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Agricultural Financial Statistics.** Annual. 21-205-XPB
- **Livestock Statistics.** Irregular. 23-603-XPE
- **Canadian Forestry Statistics.** Annual. 25-202-PPP
- **General Review of the Mineral Industries, Mines, Quarries and Oil Wells.** Annual. 26-201-XPB
- **Canada's Mineral Production, Preliminary Estimate.** Annual. 26-202-XPB
- **Agricultural Profile of Canada 1996.** Census. 93-356-XPB
- **Canadian Agriculture at a Glance 1994.** Census. 96-301

Selected publications from other sources

- **Canadian Minerals Yearbook.** Natural Resources Canada. 1996.
- **Canadian Mining Facts.** Natural Resources Canada. 1997.
- **Energy Statistics Handbook.** Natural Resources Canada. 1997.
- **Overview of Trends in Canadian Mineral Exploration.** Natural Resources Canada. 1997.
- **The State of Canada's Forests, 1996-1997.** Natural Resources Canada.



## Primary Industries

### Legend

- nil or zero	.. not available	x confidential
-- too small to be expressed	... not applicable or not appropriate	(Certain tables may not add due to rounding)

### 10.1 Farm Cash Receipts

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ thousands									
<b>Total farm cash receipts</b>	<b>22,370,236</b>	<b>22,854,155</b>	<b>21,929,845</b>	<b>21,942,051</b>	<b>23,663,817</b>	<b>24,145,585</b>	<b>25,829,318</b>	<b>27,025,189</b>	<b>28,640,177</b>	<b>29,513,945</b>
<b>Crops</b>	<b>8,298,041</b>	<b>8,772,928</b>	<b>8,882,030</b>	<b>8,732,409</b>	<b>8,545,203</b>	<b>9,023,123</b>	<b>11,511,193</b>	<b>13,039,509</b>	<b>13,924,117</b>	<b>13,903,929</b>
Canadian Wheat Board payments	390,791	642,289	489,891	331,597	489,336	1,057,920	1,367,430	1,432,766	1,123,878	..
Wheat	2,574,626	2,169,406	2,695,540	2,743,661	2,232,747	1,752,365	2,436,272	2,815,883	3,556,813	3,625,955
Oats	117,746	145,067	80,952	53,801	97,906	144,940	144,883	224,677	309,626	274,136
Barley	514,353	686,274	545,232	472,485	386,377	401,878	517,327	719,800	974,379	734,534
Deferred grain receipts	-176,055	102,718	73,613	107,496	9,144	-39,086	-416,748	-70,974	-217,281	102,569
Canola	990,671	948,035	789,573	829,527	999,390	1,194,351	2,111,157	1,906,361	2,003,656	1,998,589
Other cereals and oilseeds	1,081,609	982,856	980,561	952,067	1,011,322	1,057,684	1,306,062	1,741,274	1,850,416	1,977,675
Other crops	2,804,300	3,096,285	3,226,668	3,241,777	3,319,151	3,453,071	4,044,810	4,269,721	..	..
<b>Livestock and products</b>	<b>10,697,985</b>	<b>10,833,041</b>	<b>11,194,576</b>	<b>10,855,559</b>	<b>11,335,423</b>	<b>12,279,827</b>	<b>12,494,232</b>	<b>12,674,057</b>	<b>13,676,734</b>	<b>14,538,521</b>
Cattle and calves	3,968,178	3,964,333	4,023,620	3,877,806	4,457,228	4,968,885	4,846,977	4,646,029	4,624,603	5,176,074
Hogs	1,788,452	1,793,338	2,019,846	1,841,623	1,776,385	2,040,121	2,036,148	2,256,757	2,887,770	2,992,189
Hens and chickens	835,250	918,822	970,988	935,397	922,803	1,006,808	1,060,948	1,050,960	1,247,062	1,295,659
Dairy products	3,087,950	3,102,428	3,154,774	3,162,712	3,089,477	3,129,885	3,355,341	3,464,087	3,515,678	3,710,162
Other livestock and products	995,218	1,030,048	1,004,723	1,025,803	1,078,686	1,123,163	1,183,901	..	..	..
<b>Payments</b>	<b>3,374,210</b>	<b>3,248,186</b>	<b>1,853,239</b>	<b>2,354,083</b>	<b>3,783,191</b>	<b>2,842,635</b>	<b>1,823,893</b>	<b>1,311,623</b>	<b>1,039,326</b>	<b>1,071,495</b>
Gross Revenue Insurance Plan	-	-	-	837,656	1,389,629	1,335,263	541,863	185,403	31,522	22,683
Crop insurance	604,343	994,725	642,648	339,241	410,842	770,799	613,005	481,463	338,447	373,789
Provincial stabilization	360,125	344,892	237,622	364,875	367,800	261,959	300,472	308,076	296,758	172,539
Tripartite	136,453	486,146	148,572	107,891	371,031	21,272	67,586	10,551	-461	5,577
Other payments	2,273,289	1,422,423	824,397	704,420	1,243,889	453,342	300,967	326,130	373,060	..

Source: Statistics Canada, CANSIM, matrix 3571.

**10.2 Income of Farm Operators**

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ thousands									
Total cash receipts	22,370,240	22,854,154	21,929,848	21,942,051	23,663,817	24,145,585	25,829,318	27,025,189	28,640,177	29,513,945
- Operating expenses after rebates	15,927,260	16,955,658	17,056,832	17,378,628	17,918,705	18,774,888	20,114,586	21,096,534	22,266,352	22,565,033
= Net cash income	6,442,980	5,898,496	4,873,016	4,563,423	5,745,112	5,370,697	5,714,732	5,928,655	6,373,825	6,948,912
+ Income in kind	194,685	194,170	191,059	184,747	189,638	214,595	228,527	220,190	221,804	224,520
- Depreciation charges	2,770,246	2,893,485	2,989,153	2,994,996	3,011,819	3,088,969	3,271,113	3,500,857	3,708,232	3,946,997
= Realized net income	3,867,419	3,199,181	2,074,922	1,753,174	2,922,931	2,496,323	2,672,146	2,647,988	2,887,397	3,226,435
+ Value of inventory change	-1,046,037	881,331	1,338,082	261,326	-418,974	1,147,012	448,035	474,703	1,120,458	-1,414,347
<b>= Total net income</b>	<b>2,821,382</b>	<b>4,080,512</b>	<b>3,413,004</b>	<b>2,014,500</b>	<b>2,503,957</b>	<b>3,643,335</b>	<b>3,120,181</b>	<b>3,122,691</b>	<b>4,007,855</b>	<b>1,812,088</b>

Source: Statistics Canada, CANSIM, matrix 263.

**10.3 Farm Product Price Index<sup>1</sup>**

	1992	1993	1994	1995	1996	1997
	1986=100					
<b>Canada</b>	<b>108.2</b>	<b>113.5</b>	<b>117.3</b>	<b>121.7</b>	<b>127.3</b>	<b>129.9</b>
Newfoundland	109.2	116.3	119.0	118.2	118.5	124.4
Prince Edward Island	105.7	107.8	111.3	115.9	120.3	120.8
Nova Scotia	109.1	114.2	116.8	118.8	125.9	127.5
New Brunswick	111.1	115.1	118.1	120.8	127.7	128.8
Quebec	109.2	112.0	116.2	120.4	130.1	129.8
Ontario	114.3	121.8	125.1	127.1	133.4	136.6
Manitoba	105.9	109.7	115.0	121.7	126.6	129.0
Saskatchewan	102.7	106.8	110.1	116.8	121.1	121.9
Alberta	105.2	111.1	115.5	120.3	123.5	128.5
British Columbia	110.1	115.6	118.8	123.4	129.7	133.8

1. Indexes for the provinces are not available for the years prior to 1992.

Source: Statistics Canada, CANSIM, matrices 2050, 2053 to 2058, 2060 to 2063.

10.4 Census Farms,<sup>1</sup> by Type, 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
<b>Census farms</b>	<b>252,839</b>	<b>573</b>	<b>2,015</b>	<b>3,600</b>	<b>2,775</b>	<b>33,906</b>	<b>59,887</b>	<b>22,456</b>	<b>54,979</b>	<b>54,626</b>	<b>18,022</b>
Cattle (beef)	67,531	28	592	912	758	5,968	14,172	7,018	8,952	24,718	4,413
Grain and oilseed (except wheat)	51,577	—	39	6	22	2,639	12,250	6,110	19,928	10,343	240
Wheat	29,526	—	9	2	3	85	466	3,407	20,192	5,243	119
Miscellaneous specialty	28,715	139	125	868	542	6,260	8,547	1,334	1,322	4,794	4,784
Dairy	24,411	63	337	502	399	10,730	8,320	946	512	1,418	1,184
Field crop (except grain and oilseed)	16,245	39	528	176	449	2,004	4,965	1,248	1,390	3,825	1,621
Hog	8,063	13	103	93	75	2,315	2,677	946	486	1,149	206
Fruit	7,107	36	56	607	232	1,086	2,016	85	58	95	2,836
Livestock combination	6,217	15	93	76	54	376	2,030	489	1,013	1,448	623
Other combination	5,007	60	42	101	79	608	1,330	407	906	998	476
Poultry and egg	4,833	54	37	113	79	832	1,686	401	179	527	925
Vegetable	3,607	126	54	144	83	1,003	1,428	65	41	68	595

1. Census farms with sales of \$25,000 or more.

Source: Statistics Canada, Catalogue no. 93-356-XPB.

## 10.5 Livestock and Livestock Products, 1996–1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
Cattle and calves (thousand head) <sup>1</sup>	14,913	8	94	129	101	1,488	2,259	1,479	2,885	5,605	865
Pigs (thousand head) <sup>1</sup>	12,126	5	115	130	106	3,467	3,308	1,892	888	2,015	200
Sheep and lambs (thousand head) <sup>1</sup>	831	6	4	25	8	141	225	42	72	254	54
Poultry (tonnes) <sup>2</sup>	892,204	10,490	2,884	30,380	22,828	245,126	320,000	40,366	22,150	75,390	122,579
Eggs (thousand dozen) <sup>2</sup>	490,090	6,700	2,480	17,088	12,715	85,188	188,756	52,078	21,632	41,053	62,400
Milk and cream (thousand kilolitres) <sup>2</sup>	7,173	30	95	169	124	2,730	2,392	274	198	595	567

1. As of July 1997.

2. 1996.

Sources: Statistics Canada, CANSIM, matrix 1150 and Catalogue nos. 23-001-XPB and 23-202-XPB.

## 10.6 Field Crops

	Area seeded					Production				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
	thousand hectares					thousand tonnes				
<b>Wheat</b>										
<b>Canada</b>	<b>12,984.6</b>	<b>11,001.4</b>	<b>11,388.3</b>	<b>12,496.5</b>	<b>11,567.1</b>	<b>27,231.5</b>	<b>22,933.0</b>	<b>25,017.4</b>	<b>29,801.4</b>	<b>24,270.2</b>
Prince Edward Island	9.2	11.5	12.9	9.6	9.3	25.2	37.2	41.2	32.2	29.0
Nova Scotia	1.8	2.2	2.9	2.7	2.5	6.9	7.4	9.6	9.7	5.7
New Brunswick	2.5	3.1	3.4	3.5	3.9	7.6	5.9	9.2	12.8	12.1
Quebec	38.8	42.0	36.1	34.7	24.0	111.5	105.1	99.4	92.5	71.6
Ontario	224.6	307.5	311.6	368.3	252.9	680.3	1,260.1	1,363.5	862.7	830.0
Manitoba	2,077.2	1,661.2	1,626.7	1,709.7	1,574.2	3,637.3	3,696.6	3,404.7	4,376.5	3,350.2
Saskatchewan	7,588.0	6,428.4	6,620.6	7,353.1	6,956.5	15,031.2	12,110.9	12,663.5	16,547.0	13,070.2
Alberta	2,994.7	2,505.0	2,723.5	2,974.5	2,721.6	7,620.2	5,592.7	7,266.5	7,789.1	6,839.3
British Columbia	47.8	40.5	50.6	40.4	22.2	111.3	117.1	159.8	78.9	62.1
<b>Canola (rapeseed)</b>										
<b>Canada</b>	<b>4,172.3</b>	<b>5,797.1</b>	<b>5,348.0</b>	<b>3,540.3</b>	<b>4,877.6</b>	<b>5,524.9</b>	<b>7,232.5</b>	<b>6,436.4</b>	<b>5,062.3</b>	<b>6,198.0</b>
Ontario	20.2	22.3	36.4	22.3	26.3	38.6	45.4	68.0	45.4	54.4
Manitoba	752.7	1,031.9	951.0	635.4	930.8	907.2	1,485.5	1,227.0	1,068.2	1,417.5
Saskatchewan	1,881.8	2,670.9	2,509.1	1,578.3	2,266.2	2,381.4	3,175.1	2,630.8	2,222.6	2,651.2
Alberta	1,477.1	2,023.4	1,800.9	1,274.8	1,618.7	2,154.6	2,472.1	2,449.4	1,701.0	2,041.2
British Columbia	40.5	48.6	50.6	26.3	30.4	43.1	54.4	61.2	19.1	22.7
<b>Barley</b>										
<b>Canada</b>	<b>4,559.2</b>	<b>4,330.4</b>	<b>4,656.3</b>	<b>5,238.0</b>	<b>5,019.5</b>	<b>12,972.1</b>	<b>11,690.0</b>	<b>13,034.7</b>	<b>15,562.0</b>	<b>13,647.0</b>
Prince Edward Island	32.8	30.4	32.4	36.7	40.9	91.7	86.9	93.7	118.4	136.3
Nova Scotia	4.8	4.9	5.7	5.0	6.5	13.5	14.4	16.7	17.2	16.7
New Brunswick	16.2	14.2	16.6	16.6	16.2	45.6	34.9	44.3	56.1	52.6
Quebec	155.0	147.0	130.0	125.2	126.0	435.0	340.0	350.0	355.0	415.0
Ontario	170.0	141.6	133.5	133.5	137.6	500.8	446.3	418.0	391.9	435.4
Manitoba	465.4	445.2	485.6	627.3	566.6	1,241.0	1,328.1	1,328.1	2,111.9	1,685.2
Saskatchewan	1,618.7	1,537.8	1,740.1	1,902.0	1,821.1	4,245.6	3,919.0	4,354.5	5,356.0	4,430.7
Alberta	2,063.9	1,983.0	2,084.1	2,347.2	2,266.2	6,314.0	5,464.9	6,335.8	7,076.0	6,390.2
British Columbia	32.4	26.3	28.3	44.5	38.4	84.9	55.5	93.6	79.5	84.9



## 10.6 Field Crops (continued)

	Area seeded					Production				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
	thousand hectares					thousand tonnes				
<b>Specialty crops</b>										
<b>Canada</b>	<b>1,362.6</b>	<b>1,786.6</b>	<b>1,653.0</b>	<b>1,393.6</b>	<b>1,675.5</b>	<b>1,741.1</b>	<b>2,568.1</b>	<b>2,329.2</b>	<b>2,130.8</b>	<b>2,556.5</b>
Peas										
Manitoba	80.9	85.0	72.8	58.7	83.0	85.7	168.7	147.0	132.0	178.3
Saskatchewan	303.5	449.2	546.3	364.2	607.0	585.1	898.1	868.2	729.4	1,158.0
Alberta	121.4	161.9	188.2	117.4	155.8	299.4	374.2	412.3	307.5	421.8
Lentils										
Manitoba	52.6	46.5	20.2	16.2	3.2	24.1	49.9	28.5	21.0	5.3
Saskatchewan	303.5	335.9	297.4	279.2	315.7	315.2	381.0	381.9	373.8	365.1
Alberta	16.2	16.2	16.2	8.1	10.1	9.4	19.5	21.5	7.7	8.3
Canary seed										
Manitoba	4.9	10.1	10.1	28.3	8.1	3.1	13.6	12.2	33.7	9.2
Saskatchewan	121.4	194.2	133.5	210.4	101.2	124.7	226.8	137.9	240.0	102.1
Mustard seed										
Manitoba	4.0	4.0	4.0	4.4	6.9	3.8	4.1	2.6	4.9	6.3
Saskatchewan	161.9	283.2	222.6	198.3	226.6	180.0	278.9	190.6	196.9	186.4
Alberta	24.3	36.4	46.5	36.4	58.7	32.1	36.3	60.3	29.0	50.6
Sunflower seed										
Manitoba	85.0	83.0	48.6	36.4	50.6	47.2	86.6	43.5	37.7	47.6
Saskatchewan	50.6	56.7	30.4	25.5	34.4	29.0	25.9	18.4	15.7	14.3
Alberta	32.4	24.3	16.2	10.1	14.2	2.3	4.5	4.3	1.5	3.2
<b>Oats</b>										
<b>Canada</b>	<b>1,724.5</b>	<b>1,839.2</b>	<b>1,571.4</b>	<b>2,060.3</b>	<b>1,874.2</b>	<b>3,549.1</b>	<b>3,637.6</b>	<b>2,857.5</b>	<b>4,361.1</b>	<b>3,484.7</b>
Prince Edward Island	4.0	5.3	5.7	6.1	5.3	9.3	12.3	12.4	15.9	14.4
Nova Scotia	4.0	3.5	2.4	2.9	4.5	8.6	6.6	5.8	7.1	7.5
New Brunswick	10.9	10.5	9.3	9.5	8.9	21.7	19.7	17.5	25.4	20.4
Quebec	101.0	96.0	87.0	85.1	85.0	220.0	183.0	173.0	185.0	195.0
Ontario	66.8	48.6	40.5	40.5	46.5	141.1	100.2	86.4	78.7	95.6
Manitoba	242.8	303.5	303.5	424.9	323.7	493.5	663.2	624.6	1,056.4	735.6
Saskatchewan	607.0	728.4	607.0	890.3	809.4	1,079.5	1,388.0	1,110.4	1,881.5	1,403.4
Alberta	647.5	607.0	485.6	566.6	566.6	1,465.1	1,187.5	771.1	1,079.5	979.3
British Columbia	40.5	36.4	30.4	34.4	24.3	110.3	77.1	56.3	31.6	33.5
<b>Flaxseed</b>										
<b>Canada</b>	<b>528.1</b>	<b>732.4</b>	<b>876.1</b>	<b>592.9</b>	<b>833.7</b>	<b>627.4</b>	<b>967.7</b>	<b>1,104.9</b>	<b>851.0</b>	<b>966.6</b>
Manitoba	232.7	279.2	313.6	230.7	303.5	243.9	381.0	403.9	358.2	378.5
Saskatchewan	271.1	424.9	526.1	348.0	505.9	342.9	546.1	647.7	472.5	556.3
Alberta	24.3	28.3	36.4	14.2	24.3	40.6	40.6	53.3	20.3	31.8

## 10.6 Field Crops (concluded)

	Area seeded					Production				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
	thousand hectares					thousand tonnes				
<b>Rye</b>										
<b>Canada</b>	<b>238.4</b>	<b>239.2</b>	<b>215.0</b>	<b>218.3</b>	<b>208.0</b>	<b>318.6</b>	<b>399.2</b>	<b>309.6</b>	<b>309.4</b>	<b>299.7</b>
Prince Edward Island	—	—	—	—	—	—	—	—	—	—
Nova Scotia	—	—	—	—	—	—	—	—	—	—
Quebec	1.2	2.5	2.5	3.8	3.3	0.8	1.7	2.0	2.4	2.1
Ontario	22.3	32.4	30.4	32.4	28.3	26.7	45.7	45.7	40.6	48.3
Manitoba	28.3	18.2	32.4	32.4	40.5	43.2	38.1	53.3	66.0	58.4
Saskatchewan	133.6	129.5	101.2	101.2	87.0	165.1	221.0	139.7	134.6	138.5
Alberta	50.6	54.6	46.5	44.5	46.5	81.3	88.9	66.1	64.1	49.6
British Columbia	2.4	2.0	2.0	4.0	2.4	1.5	3.8	2.8	1.7	2.8
<b>Soybeans</b>										
<b>Canada</b>	<b>728.7</b>	<b>820.1</b>	<b>826.0</b>	<b>876.0</b>	<b>1,061.7</b>	<b>1,851.3</b>	<b>2,250.7</b>	<b>2,293.0</b>	<b>2,169.5</b>	<b>2,737.7</b>
Prince Edward Island	7.7	5.3	4.5	2.3	2.8	16.5	12.3	7.8	4.4	5.7
Quebec	33.0	56.0	85.0	96.7	120.0	93.0	170.0	244.0	260.0	337.0
Ontario	688.0	758.8	736.5	777.0	938.9	1,741.8	2,068.4	2,041.2	1,905.1	2,395.0
<b>Grain corn</b>										
<b>Canada</b>	<b>1,007.6</b>	<b>961.6</b>	<b>1,005.5</b>	<b>1,130.8</b>	<b>1,052.5</b>	<b>6,501.2</b>	<b>7,042.9</b>	<b>7,270.9</b>	<b>7,541.7</b>	<b>7,179.8</b>
Nova Scotia	2.4	2.8	2.2	2.7	2.5	9.5	11.0	13.2	12.9	11.0
Quebec	295.0	283.0	283.0	331.8	330.0	1,870.0	2,000.0	2,020.0	2,300.0	2,180.0
Ontario	688.0	647.5	700.1	766.9	688.0	4,572.2	4,902.4	5,131.0	5,080.2	4,826.2
Manitoba	20.2	26.3	18.2	28.3	30.4	36.8	116.8	94.0	142.2	152.4
Alberta	2.0	2.0	2.0	1.1	1.6	12.7	12.7	12.7	6.4	10.2
<b>Tame hay</b>										
<b>Canada</b>	<b>6,508.5</b>	<b>6,913.2</b>	<b>6,649.0</b>	<b>6,395.6</b>	<b>6,366.4</b>	<b>29,658.7</b>	<b>31,830.8</b>	<b>27,064.1</b>	<b>28,025.0</b>	<b>21,001.1</b>
Newfoundland	5.4	5.5	5.5	5.1	5.1	34.5	34.5	44.5	40.8	37.2
Prince Edward Island	49.0	49.0	49.8	54.7	55.4	307.5	252.2	245.5	340.2	285.8
Nova Scotia	71.0	71.2	70.4	71.4	72.0	390.5	560.6	505.3	607.0	451.4
New Brunswick	64.7	64.3	62.7	70.1	70.8	377.4	317.5	352.0	362.9	349.3
Quebec	930.0	920.0	870.0	882.6	880.0	6,350.0	5,800.0	5,800.0	5,700.0	4,800.0
Ontario	1,072.4	1,060.3	1,031.9	1,023.9	1,031.9	7,711.1	6,985.3	6,803.9	5,851.3	5,760.6
Manitoba	768.9	789.1	801.3	774.3	768.9	2,966.5	2,993.7	2,086.5	2,903.0	1,451.5
Saskatchewan	1,133.1	1,315.2	1,193.8	1,127.1	1,133.1	2,540.1	4,263.8	2,177.2	3,401.9	1,632.9
Alberta	2,063.9	2,286.5	2,266.2	2,019.4	1,983.0	7,348.2	9,162.6	7,620.4	6,803.9	4,490.6
British Columbia	350.1	352.1	297.4	367.0	366.2	1,632.9	1,460.6	1,428.8	2,014.0	1,741.8

Source: Statistics Canada, CANSIM, matrices 3541, 3545 to 3547, 3551, 3553, 3555 to 3559, 3561, 3563 and 3565.

## 10.7 Use of Farmland

		Total area of farms	Improved land			All other land
			Under crops	Improved pasture <sup>1</sup>	Summer fallow <sup>2</sup>	
			km <sup>2</sup>			
Canada	1991	677,537.0	335,077.8	41,412.2	79,209.5	221,837.5
	1996	680,549.6	349,187.3	43,491.4	62,607.3	225,263.6
Newfoundland	1991	473.5	62.7	46.1	1.5	363.3
	1996	438.4	71.8	23.6	1.0	342.0
Prince Edward Island	1991	2,588.8	1,541.0	192.8	10.0	845.0
	1996	2,652.2	1,703.6	118.3	3.7	826.6
Nova Scotia	1991	3,970.3	1,062.3	307.2	11.9	2,588.9
	1996	4,273.2	1,123.6	250.1	5.8	2,893.7
New Brunswick	1991	3,756.3	1,222.5	250.5	15.5	2,267.8
	1996	3,860.2	1,350.1	198.7	4.3	2,307.1
Quebec	1991	34,296.1	16,384.5	2,709.2	147.1	15,055.2
	1996	34,562.1	17,388.1	1,973.4	87.8	15,112.8
Ontario	1991	54,513.8	34,116.7	3,902.1	636.6	15,858.4
	1996	56,168.6	35,449.3	3,483.5	196.2	17,039.6
Manitoba	1991	77,249.9	47,610.5	3,412.9	2,970.0	23,256.5
	1996	77,321.4	46,991.5	3,562.4	3,236.5	23,531.0
Saskatchewan	1991	268,654.9	134,589.1	10,756.6	57,128.3	66,180.9
	1996	265,690.6	143,986.5	12,333.1	44,314.5	65,056.5
Alberta	1991	208,110.0	92,920.4	17,424.8	17,714.0	80,050.9
	1996	210,292.3	95,465.5	19,146.0	14,367.4	81,313.4
British Columbia	1991	23,923.4	5,568.0	2,410.0	574.8	15,370.7
	1996	25,290.6	5,657.4	2,402.4	390.2	16,840.6

1. The 1991 Census included a separate question on unimproved land for pasture, resulting in more accurate reporting of improved pasture.

2. The data for summer fallow have been overstated for both census years in geographic areas where the practice is not common. However, a question added to the 1991 questionnaire on the use of weed control methods on summer fallow land significantly reduced the extent of this over-reporting of improved pasture.

Source: Statistics Canada, Catalogue no. 93-348-XPE.

## 10.8 Nominal Catches and Landed Values of Fish

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
metric tonnes, live weight											
<b>Quantity</b>											
<b>Canada</b>	<b>1,515,186</b>	<b>1,602,497</b>	<b>1,703,387</b>	<b>1,656,286</b>	<b>1,690,656</b>	<b>1,558,212</b>	<b>1,362,452</b>	<b>1,201,636</b>	<b>1,070,641</b>	<b>880,891</b>	<b>..</b>
Atlantic	1,244,957	1,300,949	1,385,137	1,317,902	1,342,428	1,192,445	1,020,426	872,288	719,330	633,413	676,355
Pacific	224,722	252,189	265,947	287,185	303,510	316,587	299,390	290,897	314,977	243,825	242,376
Sea fisheries	1,469,679	1,553,138	1,651,084	1,605,087	1,645,938	1,509,032	1,319,816	1,163,185	1,034,307	877,238	918,731
Freshwater	45,507	49,359	52,303	51,199	44,718	49,180	42,636	38,451	36,334	38,207	..
\$ thousands											
<b>Value</b>											
<b>Canada</b>	<b>1,353,359</b>	<b>1,659,800</b>	<b>1,643,869</b>	<b>1,496,078</b>	<b>1,500,161</b>	<b>1,467,353</b>	<b>1,478,147</b>	<b>1,484,073</b>	<b>1,778,222</b>	<b>1,797,273</b>	<b>..</b>
Atlantic	880,145	1,129,962	1,016,478	959,775	953,930	1,013,769	984,140	957,547	1,125,948	1,350,250	1,120,382
Pacific	396,388	442,678	533,558	453,613	479,818	380,181	416,127	464,796	582,442	413,349	415,796
Sea fisheries	1,276,533	1,572,640	1,550,036	1,413,388	1,433,748	1,393,950	1,400,267	1,422,343	1,708,390	1,763,599	1,536,178
Freshwater	76,826	87,160	93,833	82,690	66,413	73,403	77,880	61,730	69,832	76,590	..

Source: Department of Fisheries and Oceans, Economic and Policy Analysis Directorate.

## 10.9 Energy Summary

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	petajoules <sup>1</sup>								
Primary production	11,195.9	11,372.0	11,392.6	11,789.0	12,239.9	13,034.3	13,941.3	14,496.1	14,961.8
Net supply <sup>2</sup>	7,850.6	8,112.5	7,865.6	7,764.5	7,929.7	8,190.7	8,417.6	8,606.8	8,980.0
Producers' own consumption	870.2	932.9	906.0	878.4	921.3	932.2	976.2	997.4	1,006.2
Non-energy use	676.9	676.9	638.3	665.8	679.5	735.1	744.9	726.9	844.9
Energy use	6,309.0	6,499.1	6,321.2	6,221.0	6,328.1	6,523.0	6,696.8	6,882.5	7,129.1
Industrial	2,121.8	2,127.6	2,043.6	2,021.7	1,989.6	2,034.8	2,086.0	2,188.7	2,247.4
Transportation	1,839.4	1,870.5	1,821.3	1,785.0	1,870.1	1,916.8	2,027.0	2,070.3	2,129.7
Agriculture	180.4	200.5	204.7	195.3	223.6	198.5	194.5	206.5	223.9
Residential	1,146.0	1,224.4	1,197.1	1,166.2	1,179.4	1,257.4	1,277.0	1,254.9	1,362.2
Public administration	140.2	145.9	144.0	136.8	135.5	133.1	144.9	141.5	135.6
Commercial and institutional	881.2	930.3	910.5	915.9	929.8	982.4	967.3	1,020.7	1,030.3

1. A 30-litre gasoline fill-up contains about one gigajoule of energy. A petajoule is one million gigajoules.

2. Net supply of primary and secondary sources.

Source: Statistics Canada, CANSIM, matrix 7977.

10.10 Primary Energy Production<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	petajoules								
<b>Primary sources</b>									
Production	11,195.9	11,372.0	11,392.6	11,789.0	12,239.9	13,034.3	13,941.3	14,496.1	14,961.8
Exports	4,108.3	4,138.0	4,188.2	4,802.0	5,203.4	5,630.6	6,347.1	6,880.4	7,103.6
Imports	1,551.4	1,599.2	1,698.6	1,610.5	1,561.0	1,628.9	1,743.2	1,684.6	1,976.5
Adjustments <sup>2</sup>	..	-96.3	195.7	-70.8	-202.5	100.6	121.8	101.3	162.7
Available	8,660.1	8,945.2	8,779.2	8,632.8	8,760.3	9,047.5	9,360.0	9,522.6	9,945.1
Transformed to other energy forms <sup>3</sup>	4,590.5	4,725.4	4,620.1	4,446.7	4,470.6	4,528.6	4,720.7	4,770.6	4,962.7
<b>Coal</b>									
Production	1,614.2	1,718.4	1,669.3	1,748.0	1,545.8	1,651.3	1,735.3	1,800.8	1,832.6
Exports	875.7	997.8	943.0	1,036.1	830.9	860.0	964.9	1,035.7	1,049.7
Imports	506.5	420.7	408.7	359.2	371.9	243.4	265.6	281.8	347.3
Adjustments <sup>2</sup>	..	-57.7	69.1	-36.2	-48.4	-3.8	-57.8	-52.1	13.9
Available	1,200.3	1,197.8	1,077.2	1,104.4	1,137.1	1,044.0	1,086.4	1,098.4	1,137.9
Transformed to other energy forms <sup>3</sup>	1,138.8	1,139.0	1,020.1	1,056.1	1,090.9	996.7	1,036.0	1,040.6	1,078.4
<b>Crude oil<sup>4</sup></b>									
Production	3,877.9	3,769.3	3,734.8	3,729.4	3,884.9	4,070.7	4,299.9	4,451.1	4,591.9
Exports	1,588.9	1,446.0	1,462.5	1,703.7	1,876.4	2,051.8	2,219.0	2,396.1	2,547.7
Imports	1,002.6	1,087.8	1,198.1	1,214.7	1,146.2	1,323.9	1,405.0	1,337.7	1,551.1
Adjustments <sup>2</sup>	..	..	..	..	..	..	..	178.1	140.7
Available	3,359.5	3,424.0	3,463.0	3,248.5	3,174.8	3,462.0	3,604.1	3,611.1	3,769.3
Transformed to other energy forms <sup>3</sup>	..	..	3,463.1	3,248.5	3,174.8	3,360.2	3,493.3	3,492.4	3,671.9



10.10 Primary Energy Production<sup>1</sup> (concluded)

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	petajoules								
<b>Natural gas<sup>5</sup></b>									
Production	3,942.1	4,174.7	4,261.6	4,486.3	4,960.1	5,348.0	5,831.3	6,129.3	6,336.7
Exports	1,360.4	1,432.3	1,537.2	1,804.0	2,195.3	2,395.3	2,752.6	3,011.1	3,049.3
Imports	14.6	29.2	24.2	12.1	17.1	30.9	40.0	25.7	46.3
Adjustments <sup>2</sup>	..	..	..	..	..	..	..	-116.3	-64.6
Available	2,592.7	2,789.9	2,701.9	2,705.4	2,862.7	2,885.7	3,010.3	3,123.7	3,253.3
Transformed to other energy forms <sup>3</sup>	..	..	93.0	87.3	135.1	155.6	173.4	186.3	189.4
<b>Natural gas liquids<sup>6</sup></b>									
Production	371.0	377.9	404.9	416.7	434.8	484.7	528.9	582.3	613.8
Exports	160.7	181.6	179.8	169.9	187.3	197.8	227.3	281.2	299.2
Imports	5.4	14.8	3.6	2.7	2.6	3.6	7.4	12.7	9.5
Adjustments <sup>2</sup>	..	..	..	..	..	..	..	91.7	72.7
Available	217.2	235.6	216.7	232.1	261.7	274.9	271.4	286.5	333.4
Transformed to other energy forms <sup>3</sup>	43.9	45.1	43.9	54.7	69.8	16.1	18.0	60.0	42.5
<b>Electricity<sup>7</sup></b>									
Production	1,377.7	1,310.2	1,306.0	1,388.1	1,401.7	1,472.8	1,542.0	1,530.0	1,584.3
Exports	122.6	80.4	65.7	88.3	113.5	125.9	183.3	156.4	157.8
Imports	22.4	46.7	64.0	21.9	23.3	27.2	25.2	26.7	22.3
Adjustments <sup>2</sup>	..	..	..	..	..	..	..	..	..
Available	1,277.5	1,276.5	1,304.3	1,321.7	1,311.5	1,374.1	1,383.9	1,400.4	1,448.7
Transformed to other energy forms <sup>3</sup>	..	..	..	..	..	..	..	..	..
<b>Steam<sup>8</sup></b>									
Production	12.9	21.5	16.0	20.6	12.6	6.8	4.0	2.6	2.5
Exports	..	..	..	..	..	..	..	..	..
Imports	..	..	..	..	..	..	..	..	..
Adjustments <sup>2</sup>	..	..	..	..	..	..	..	..	..
Available	12.9	21.5	16.0	20.6	12.6	6.8	4.0	2.6	2.5
Transformed to other energy forms <sup>3</sup>	..	..	..	..	..	..	..	..	..

1. The quantities of crude oil and natural gas shown here include an estimate of producers' own consumption in the synthetic crude and heavy sectors.

2. Includes stock variation, interproduct transfers and other adjustments.

3. For electricity and steam generation, coal coke production and for refined petroleum products.

4. The general terms "crude oil" and "crude oil and equivalent" comprise conventional crude, condensate, pentanes, synthetic crude oil and experimental crude oil.

5. Gross production including reinjection and shrinkage.

6. Gas plant NGLs (natural gas liquids) include butane, propane and ethane.

7. Hydro and nuclear only.

8. Steam produced from nuclear sources.

Source: Statistics Canada, CANSIM, matrix 7977.

10.11 Energy Use<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	petajoules								
<b>Primary and secondary energy</b>									
Producers' own consumption	870.2	932.9	906.0	878.4	921.3	932.2	976.2	997.4	1,006.2
Non-energy use	676.9	676.9	638.4	665.8	679.5	735.1	744.9	726.9	844.9
Energy use, final demand	6,309.0	6,499.1	6,321.2	6,221.0	6,328.1	6,523.0	6,696.8	6,876.5	7,129.1
Industrial	2,121.8	2,127.6	2,043.6	2,021.7	1,989.6	2,034.8	2,086.0	2,182.7	2,247.4
Transportation	1,839.4	1,870.5	1,821.3	1,785.0	1,870.1	1,916.8	2,027.0	2,070.3	2,129.7
Agricultural	180.4	200.5	204.7	195.3	223.6	198.5	194.5	206.5	223.9
Residential	1,146.0	1,224.4	1,197.1	1,166.2	1,179.4	1,257.4	1,277.0	1,254.9	1,362.2
Public administration	140.2	145.9	144.0	136.8	135.5	133.1	144.9	141.5	135.6
Commercial and institutional	881.2	930.3	910.5	915.9	929.8	982.4	967.3	1,020.7	1,030.3
<b>Coal, coke and coke oven gas</b>									
Producers' own consumption	4.5	3.9	4.4	5.0	2.7	3.9	3.9	5.7	5.3
Non-energy use	17.6	16.9	15.0	10.0	6.2	6.5	9.4	11.9	11.8
Energy use, final demand	230.0	219.8	177.6	185.3	187.1	179.8	166.0	171.2	176.9
Industrial	226.7	217.4	174.9	183.1	185.1	177.9	164.3	169.3	174.9
Transportation	—	—	—	—	—	—	—	—	—
Agricultural	—	—	—	—	—	—	—	—	—
Residential	2.8	2.2	2.5	2.0	2.0	1.8	1.5	1.9	2.0
Public administration	0.2	0.2	0.2	0.1	—	—	0.2	—	—
Commercial and institutional	0.3	—	—	—	—	—	—	—	—
<b>Crude oil and petroleum products</b>									
Producers' own consumption	246.1	257.3	238.9	230.6	239.4	346.1	346.9	358.6	342.6
Non-energy use	340.4	344.2	335.2	338.6	355.2	367.9	369.1	387.6	419.2
Energy use, final demand	..	..	2,550.4	2,408.3	2,421.5	2,473.5	2,577.8	2,610.4	2,712.4
Industrial	315.3	326.6	314.6	284.0	259.1	273.5	289.4	291.7	323.1
Transportation	1,674.6	1,700.3	1,647.8	1,594.7	1,634.0	1,666.3	1,762.6	1,782.6	1,831.9
Agricultural	122.5	137.7	139.8	132.5	157.5	126.8	131.1	145.3	155.6
Residential	189.6	203.3	185.4	161.9	138.0	172.5	163.0	137.8	158.6
Public administration	75.2	78.1	79.8	71.9	68.3	63.2	63.7	61.9	56.4
Commercial and institutional	182.2	192.5	183.0	163.4	164.4	171.3	167.9	191.2	186.9
<b>Natural gas</b>									
Producers' own consumption	477.1	521.2	530.0	505.8	540.9	447.1	478.0	480.9	491.0
Non-energy use	168.6	168.1	148.9	168.7	165.7	168.9	188.2	184.5	187.2
Energy use, final demand	1,883.1	1,957.3	1,929.9	1,943.7	2,021.1	2,114.1	2,170.7	2,265.9	2,385.6
Industrial	857.4	869.6	854.8	834.6	831.6	850.7	876.4	937.6	962.2
Transportation	124.4	131.6	135.7	150.5	194.7	205.1	217.3	240.7	249.3
Agricultural	20.8	22.0	23.2	23.2	25.1	31.2	23.6	22.9	26.8
Residential	507.0	538.2	528.4	531.9	553.3	593.5	632.1	630.5	695.2
Public administration	18.6	20.6	19.0	17.9	19.9	22.4	32.7	31.2	30.5
Commercial and institutional	354.9	375.2	368.8	385.6	396.5	411.2	388.6	403.1	421.6

10.11 Energy Use<sup>1</sup> (concluded)

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	petajoules								
<b>Natural gas liquids</b>									
Producers' own consumption	1.0	1.8	2.5	0.7	4.0	2.9	3.5	4.1	1.2
Non-energy use	150.3	147.7	139.2	148.5	152.5	191.8	178.1	143.0	226.7
Energy use, final demand	95.3	99.9	90.7	88.3	88.0	119.6	127.1	138.9	122.9
Industrial	31.3	28.3	23.8	28.2	23.5	29.0	28.5	34.7	22.8
Transportation	28.3	26.4	25.9	28.9	29.2	32.4	33.9	33.1	34.8
Agricultural	5.6	8.2	7.1	5.2	6.8	6.2	4.9	4.4	4.9
Residential	12.3	13.1	12.5	9.1	14.2	11.8	9.8	11.0	14.4
Public administration	1.8	—	—	—	—	0.2	0.9	0.1	0.8
Commercial and institutional	16.0	23.9	21.3	16.9	14.3	39.9	49.1	55.6	45.1
<b>Electricity</b>									
Producers' own consumption	141.4	148.7	130.1	136.2	134.4	132.3	143.9	148.1	166.1
Non-energy use	—	—	—	—	—	—	—	—	—
Energy use, final demand	1,524.7	1,559.0	1,551.6	1,570.7	1,593.6	1,625.1	1,640.2	1,678.8	1,709.4
Industrial	675.1	661.6	654.7	667.4	673.4	693.1	712.8	738.4	743.0
Transportation	12.1	12.1	11.8	11.0	12.3	13.1	13.3	14.0	13.8
Agricultural	31.4	32.5	34.7	34.3	34.1	34.1	34.8	33.8	36.5
Residential	434.2	467.5	468.3	461.2	471.9	477.7	470.7	473.8	491.9
Public administration	44.2	46.8	45.0	47.0	47.3	47.0	47.1	48.1	47.6
Commercial and institutional	327.6	338.5	337.2	350.0	354.6	360.0	361.6	370.7	376.6
<b>Steam</b>									
Producers' own consumption	—	—	—	—	—	—	—	—	—
Non-energy use	—	—	—	—	—	—	—	—	—
Energy use, final demand	16.4	24.4	21.0	24.8	16.9	11.0	15.0	11.3	21.9
Industrial	16.0	24.0	20.8	24.6	16.8	10.6	14.6	11.0	21.5
Transportation	—	—	—	—	—	—	—	—	—
Agricultural	—	—	—	0.2	0.1	0.2	0.1	0.1	0.1
Residential	—	—	—	—	—	—	—	—	—
Public administration	0.1	0.1	0.1	—	—	0.3	0.3	0.2	0.3
Commercial and institutional	0.3	0.3	0.1	0.1	—	—	—	—	0.1

1. Net primary and secondary energy.

Source: Statistics Canada, CANSIM, matrix 7977.

## 10.12 Coal, Supply and Demand

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	kilotonnes									
<b>Supply</b>	<b>88,062</b>	<b>85,050</b>	<b>82,535</b>	<b>83,531</b>	<b>78,444</b>	<b>77,423</b>	<b>81,959</b>	<b>84,551</b>	<b>87,408</b>	<b>91,701</b>
Production	70,644	70,529	68,331	71,137	65,610	69,031	72,785	74,906	75,725	78,558
Bituminous	38,585	38,794	37,673	39,914	32,563	35,323	36,640	38,570	39,886	41,124
Sub-bituminous	19,910	20,919	21,252	22,243	23,020	23,662	25,459	25,597	24,985	25,781
Lignite	12,149	10,816	9,406	8,980	10,027	10,046	10,686	10,739	10,854	11,653
Imports	17,418	14,521	14,204	12,394	12,834	8,392	9,174	9,645	11,683	13,143
<b>Demand</b>	<b>86,192</b>	<b>86,622</b>	<b>80,045</b>	<b>84,380</b>	<b>80,064</b>	<b>77,992</b>	<b>84,459</b>	<b>85,810</b>	<b>87,519</b>	<b>92,125</b>
Domestic demand	54,467	53,795	49,036	50,265	51,967	49,678	52,862	51,824	53,060	55,615
Newfoundland and Prince Edward Island	—	—	—	—	—	—	—	—	—	—
Nova Scotia	2,313	2,144	2,196	2,314	2,359	2,441	2,927	2,882	2,965	3,069
New Brunswick	654	614	409	426	471	389	350	279	310	289
Quebec	748	753	716	478	484	524	607	727	729	727
Ontario	20,161	19,502	16,077	16,375	15,761	12,466	10,118	11,171	11,863	13,627
Manitoba	980	516	460	328	349	291	264	253	464	199
Saskatchewan	8,871	8,640	7,644	7,738	8,591	8,892	9,370	10,054	9,854	10,165
Alberta	20,540	21,409	21,339	22,480	23,752	24,194	28,206	25,228	25,794	26,567
British Columbia	114	115	108	124	200	194	163	204	198	192
Exports	31,725	32,827	31,009	34,112	28,097	28,313	31,597	33,986	34,459	36,510

Source: Statistics Canada, CANSIM, matrix 2490.

## 10.13 Net Merchantable Volume of Roundwood Harvested

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
	cubic metres										
<b>Canada</b>	<b>168,722</b>	<b>177,190</b>	<b>191,685</b>	<b>190,616</b>	<b>188,254</b>	<b>162,127</b>	<b>160,168</b>	<b>169,895</b>	<b>176,193</b>	<b>183,224</b>	<b>188,433</b>
Logs and bolts harvested	119,317	125,337	140,910	138,838	138,130	117,262	118,539	129,568	137,740	142,525	148,837
Pulpwood harvested	40,620	42,694	41,753	43,210	41,651	35,865	31,280	30,839	29,375	32,010	31,089
Fuelwood and firewood harvested	6,708	6,902	6,629	6,289	6,150	6,169	6,681	6,388	6,423	5,879	5,319
Other industrial roundwood harvested	2,077	2,257	2,393	2,279	2,323	2,832	3,668	3,100	2,655	2,809	3,189
Newfoundland	2,509	2,408	2,524	2,513	2,535	2,876	2,680	2,821	3,131	2,445	2,983
Prince Edward Island	411	424	480	476	416	448	452	510	534	519	638
Nova Scotia	3,515	4,004	4,789	5,039	4,772	4,639	4,348	4,248	4,585	5,106	5,483
New Brunswick	7,896	8,720	7,869	9,199	9,281	8,824	8,643	9,205	8,959	9,269	10,055
Quebec	35,400	38,127	39,503	39,381	36,192	29,699	28,225	30,762	34,285	38,194	41,680
Ontario	28,225	30,186	29,692	29,338	29,642	25,420	23,829	24,286	25,432	25,952	26,260
Manitoba	1,717	1,703	1,887	1,883	1,848	1,563	1,278	1,598	1,539	1,786	1,987
Saskatchewan	3,016	3,529	3,666	3,818	3,685	2,758	2,957	3,081	4,433	4,468	4,258
Alberta	8,979	10,387	10,496	11,990	12,293	11,911	12,926	14,594	14,897	19,790	20,287
British Columbia	76,868	77,503	90,591	86,807	87,414	73,861	74,706	78,579	78,004	75,093	74,460
Yukon Territory	186	199	188	172	176	82	79	162	193	421	214
Northwest Territories	—	—	—	—	—	46	46	49	203	181	127

Source: Statistics Canada, CANSIM, matrix 6083.



## 10.14 Energy Production and Consumption, 1995

	Coal		Crude oil		Natural gas		Natural gas liquids		Electricity	
	production	consumption <sup>1</sup>	production	consumption <sup>1</sup>	production	consumption <sup>1</sup>	production	consumption <sup>1</sup>	production	consumption <sup>1</sup>
	kilotonnes		kilotonnes		terajoules		kilotonnes		gigawatt hours	
<b>Canada</b>	<b>78,199</b>	<b>56,373</b>	<b>91,828</b>	<b>74,212</b>	<b>6,137,362</b>	<b>3,171,090</b>	<b>18,206</b>	<b>7,757</b>	<b>551,541</b>	<b>515,519</b>
Australia	246,996	107,680	24,712	24,712	1,164,738	1,164,738	2,141	2,141	173,734	173,734
Austria	2,745	7,472	1,036	8,649	58,688	293,832	43	43	56,488	54,018
Belgium	3,717	16,905	--	26,369	10	493,621	--	--	74,459	78,531
Denmark	--	10,984	9,170	10,362	216,327	145,199	--	--	36,787	35,993
Finland	8,946	14,625	--	8,658	--	136,821	--	--	63,896	70,870
France	14,268	30,733	2,503	80,053	129,928	1,379,992	410	410	493,900	424,059
Germany	272,038	292,993	2,926	103,351	689,087	3,089,894	--	--	537,045	541,869
Greece	57,775	58,548	435	14,862	2,041	2,041	22	10	41,457	41,457
Iceland	--	83	--	--	--	--	--	--	4,981	4,981
Ireland	5,436	8,087	--	2,229	104,564	108,184	--	--	17,879	17,864
Italy	5,565	23,506	5,208	78,690	760,448	2,077,227	28	28	241,486	278,913
Japan	48,941	169,012	531	221,022	90,620	2,420,587	173	3,477	989,965	989,965
Luxembourg	--	758	--	--	--	25,916	--	--	1,237	6,240
Mexico	10,600	13,030	141,319	70,348	1,121,673	1,208,029	12,236	12,236	152,546	151,765
Netherlands	2,895	17,077	2,721	56,227	2,812,399	1,585,650	758	6,267	81,071	92,464
New Zealand	3,169	2,483	1,475	4,356	180,298	18,039	193	193	36,177	36,177
Norway	292	1,519	134,617	12,541	1,317,142	163,855	3,883	925	123,193	116,428
Portugal	331	6,004	--	12,854	--	--	--	--	33,265	34,179
Spain	30,841	45,833	652	55,269	17,650	359,242	131	131	167,084	171,570
Sweden	2,202	6,025	4	18,199	--	31,585	--	--	147,038	145,357
Switzerland	--	290	--	4,560	--	102,140	--	--	63,080	55,809
Turkey	58,206	64,105	3,516	26,049	6,971	269,555	--	1,154	86,247	85,551
United Kingdom	59,160	84,307	121,754	84,999	2,958,867	3,023,714	8,530	5,257	334,454	350,767
United States	958,644	875,512	324,303	712,063	20,272,809	23,670,208	52,004	56,345	3,582,137	3,619,185

1. Termed "domestic supply" by the International Energy Agency and defined as "production + inputs from other sources + imports - exports - international marine bunkers +/- stock changes."

Source: International Energy Agency, *Energy Statistics of OECD Countries, 1994-95*, Paris, 1997.

## 10.15 Electricity, Gross Supply and Demand

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	gigawatt hours									
<b>Supply</b>	<b>499,805.7</b>	<b>510,590.3</b>	<b>506,636.9</b>	<b>495,725.5</b>	<b>506,981.6</b>	<b>518,766.8</b>	<b>529,621.8</b>	<b>551,173.9</b>	<b>555,017.2</b>	<b>570,589.7</b>
Production	496,334.8	504,284.7	497,890.2	480,427.4	505,069.8	517,141.7	527,033.2	550,332.8	551,542.7	564,378.8
Imports	3,470.9	6,305.2	12,723.6	17,778.7	6,282.9	6,476.3	7,369.9	8,279.6	7,427.8	6,210.9
<b>Demand</b>	<b>499,805.7</b>	<b>510,590.3</b>	<b>506,636.9</b>	<b>495,725.5</b>	<b>506,981.6</b>	<b>518,766.8</b>	<b>529,621.8</b>	<b>551,173.9</b>	<b>555,017.2</b>	<b>570,589.7</b>
Domestic	452,378.9	476,561.4	484,548.4	477,597.2	482,367.2	487,217.5	494,774.1	500,162.4	511,696.5	526,714.3
Losses and producer consumption	48,985.2	53,020.8	55,460.0	49,064.8	50,432.6	49,406.8	48,135.4	51,980.8	48,659.6	51,916.6
Transportation	2,967.2	3,365.6	3,366.4	3,273.9	3,055.6	3,406.7	3,629.2	3,684.2	3,875.6	3,956.1
Farm and residential	119,313.1	129,355.8	138,883.3	139,708.9	137,618.1	140,554.7	142,187.2	140,395.8	140,941.7	146,331.4
Public and commercial	95,921.4	103,281.4	107,033.9	106,173.9	110,255.3	111,646.9	113,074.2	113,548.1	117,274.4	118,808.4
Manufacturing	161,360.6	159,264.7	155,150.6	152,074.2	156,269.7	158,088.9	163,942.5	168,256.4	173,252.2	172,697.7
Mining	23,830.6	28,272.8	28,632.2	29,782.8	29,106.7	28,965.3	28,587.8	29,735.8	31,646.1	33,004.1
Exports	47,426.8	34,028.9	22,088.5	18,128.3	24,614.4	31,549.3	34,847.7	51,011.5	43,320.6	43,875.4

Source: Statistics Canada, Catalogue no. 57-601-XDE.

## 10.16 Energy Consumer Price Indices

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	1986=100									
<b>All energy</b>	<b>103.2</b>	<b>106.8</b>	<b>117.4</b>	<b>123.2</b>	<b>123.5</b>	<b>125.1</b>	<b>125.8</b>	<b>127.4</b>	<b>131.1</b>	<b>134.3</b>
Motor gas	103.8	110.3	126.6	124.7	120.2	118.4	117.0	122.4	127.9	130.3
Fuel oil	97.9	96.8	115.2	124.6	120.0	122.0	120.5	118.8	127.0	134.7
Natural gas	96.1	91.7	87.0	95.4	99.1	102.9	111.5	104.7	103.4	111.2
Electricity	108.2	112.6	119.3	136.4	145.3	151.4	152.3	151.7	153.5	155.2

Source: Statistics Canada, CANSIM, matrix 7463.

## 10.17 Energy Trade

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>Total energy imports</b>	<b>5,014</b>	<b>6,515</b>	<b>8,864</b>	<b>6,784</b>	<b>6,652</b>	<b>6,979</b>	<b>7,486</b>	<b>8,865</b>	<b>10,478</b>	<b>12,342</b>
Petroleum	4,051	5,329	7,504	6,085	5,767	6,261	6,654	8,065	9,533	11,047
Crude oil	2,524	3,514	5,409	4,497	4,145	4,484	4,843	6,091	7,372	8,660
Petroleum products <sup>1</sup>	1,426	1,684	1,959	1,469	1,520	1,658	1,704	1,825	2,013	2,235
Liquid petroleum gases <sup>2</sup>	101	132	135	119	102	118	106	149	148	152
Natural gas	—	—	1	32	50	47	85	45	109	136
Coal and coal products	828	779	687	529	645	484	523	646	705	786
Electricity	59	297	558	70	77	85	44	78	102	165
Uranium <sup>3</sup>	76	110	116	68	114	102	182	30	29	208
<b>Total energy exports</b>	<b>13,339</b>	<b>13,491</b>	<b>15,971</b>	<b>16,310</b>	<b>17,490</b>	<b>20,138</b>	<b>22,487</b>	<b>25,039</b>	<b>29,329</b>	<b>30,558</b>
Petroleum	6,620	7,015	9,467	9,632	9,797	10,934	11,587	14,734	17,739	16,984
Crude oil	4,040	4,508	5,710	6,055	6,685	6,919	7,438	9,733	11,056	10,856
Petroleum products <sup>1</sup>	1,933	1,971	2,980	2,762	2,366	2,713	2,719	2,989	4,243	3,857
Liquid petroleum gases <sup>2</sup>	647	536	777	816	746	1,302	1,430	2,012	2,440	2,272
Natural gas	2,955	3,017	3,267	3,512	4,608	5,778	6,717	5,864	7,104	8,541
Coal and coal products	2,068	2,194	2,276	2,204	1,880	2,070	2,289	2,494	2,408	2,841
Electricity	881	659	538	554	708	857	1,273	1,203	1,229	1,356
Uranium <sup>3</sup>	815	606	423	409	497	499	621	743	849	836
<b>Energy trade balance</b>	<b>8,325</b>	<b>6,976</b>	<b>7,107</b>	<b>9,526</b>	<b>10,838</b>	<b>13,159</b>	<b>15,001</b>	<b>16,174</b>	<b>18,852</b>	<b>18,216</b>
Petroleum	2,569	1,686	1,963	3,547	4,029	4,673	4,933	6,669	8,206	5,937
Crude oil	1,516	994	300	1,558	2,540	2,434	2,594	3,642	3,684	2,196
Petroleum products <sup>1</sup>	507	287	1,021	1,292	846	1,055	1,015	1,164	2,229	1,621
Liquid petroleum gases <sup>2</sup>	546	404	642	697	644	1,184	1,324	1,864	2,293	2,120
Natural gas	2,954	3,017	3,267	3,480	4,558	5,731	6,633	5,819	6,995	8,405
Coal and coal products	1,241	1,416	1,589	1,675	1,236	1,586	1,767	1,848	1,703	2,054
Electricity	821	361	-19	484	632	772	1,229	1,125	1,128	1,191
Uranium <sup>3</sup>	739	496	307	341	383	397	439	713	820	629

1. Includes ethane products in 1987.

2. Includes ethane products, 1988–1994.

3. Includes chemicals, medicinal products and other non-energy amounts in 1987.

Source: Statistics Canada, CANSIM, matrix 2482.

## 10.18 Petroleum Supply and Demand

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	thousand cubic metres per day									
<b>Supply</b>	<b>389.7</b>	<b>414.1</b>	<b>418.4</b>	<b>420.5</b>	<b>425.2</b>	<b>433.4</b>	<b>464.0</b>	<b>481.8</b>	<b>497.6</b>	<b>522.7</b>
Domestic production	302.7	317.8	311.2	312.1	314.8	328.3	347.6	361.7	380.1	390.7
Crude and equivalent	261.4	274.3	266.4	265.0	265.0	276.0	290.1	301.5	312.4	319.0
Refined products	239.7	251.1	256.1	259.9	246.2	241.1	253.5	260.4	260.3	271.9
Motor gasoline	93.7	97.7	100.2	100.8	100.0	99.6	101.8	104.1	105.8	109.0
Aviation turbo fuel	13.6	13.5	14.6	14.5	12.3	12.6	11.6	11.8	12.7	14.2
Diesel fuel	44.6	48.5	49.6	52.7	50.2	47.0	47.6	53.1	52.1	56.7
Light fuel oil	23.2	23.3	24.9	23.3	23.4	23.8	30.0	27.7	27.4	31.2
Heavy fuel oil	19.2	22.1	23.6	24.7	23.5	21.8	21.1	19.6	18.0	19.5
Ethane, propane and butane	41.3	43.6	44.8	47.2	49.8	52.3	57.4	60.2	67.7	71.7
Imports	86.9	96.2	107.2	108.3	110.4	105.1	116.5	120.2	117.5	132.0
Crude and equivalent	64.3	71.1	77.4	85.2	86.4	81.3	94.2	98.9	93.9	108.6
Refined products	22.0	24.3	28.0	22.7	23.6	23.5	21.9	20.6	22.6	22.7
Ethane, propane and butane	0.6	0.8	1.8	0.4	0.4	0.2	0.3	0.7	1.1	0.7
<b>Demand</b>	<b>387.6</b>	<b>428.4</b>	<b>428.2</b>	<b>428.7</b>	<b>439.2</b>	<b>454.1</b>	<b>475.1</b>	<b>492.2</b>	<b>518.4</b>	<b>544.5</b>
Domestic demand	248.9	262.5	272.5	267.3	256.6	263.3	267.6	273.7	280.7	288.2
Refined products	230.7	240.6	248.6	242.7	228.3	230.6	235.3	239.5	243.2	249.7
Motor gasoline	91.0	93.3	95.4	93.0	89.9	90.9	93.3	95.9	96.0	97.0
Aviation turbo fuel	12.8	13.8	14.2	13.7	12.2	12.7	12.2	12.9	13.8	15.4
Diesel fuel	43.3	45.6	47.1	46.2	43.5	43.4	45.7	50.1	52.6	54.4
Light fuel oil	17.3	18.2	18.8	17.6	15.7	15.8	16.3	15.8	14.9	16.4
Heavy fuel oil	20.5	24.5	29.6	29.1	24.7	24.9	23.0	20.7	20.1	19.3
Ethane, propane and butane	33.3	37.3	38.1	39.0	44.0	50.6	49.6	51.0	55.9	56.6
Propane and butane adjustment	15.0	15.4	14.1	14.5	15.8	17.8	17.3	16.9	18.4	20.2
Exports	138.7	165.9	155.7	161.4	182.6	190.8	207.5	218.5	237.7	256.3
Crude and equivalent	98.7	112.8	102.9	104.0	121.2	133.1	146.0	156.2	168.1	178.3
Refined products	27.0	36.8	34.0	38.3	43.2	37.8	40.1	37.5	39.8	46.5
Ethane, propane and butane	14.7	18.0	19.7	19.4	18.3	19.9	21.6	25.0	30.0	32.1
Propane and butane adjustment	1.7	1.7	0.9	0.3	0.1	–	0.1	0.1	0.2	0.2
Stock changes	8.3	-4.6	-0.4	2.5	-0.3	-6.6	0.6	6.0	-4.1	-2.9
Losses and adjustments	-6.3	-9.8	-9.4	-10.8	-13.8	-14.1	-11.7	-16.3	-16.7	-18.8

Source: Statistics Canada, CANSIM, matrix 2483.



## 10.19 Natural Gas Supply and Demand

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
million cubic metres											
<b>Supply</b>	<b>88,829</b>	<b>102,665</b>	<b>109,171</b>	<b>111,901</b>	<b>117,794</b>	<b>130,375</b>	<b>141,826</b>	<b>153,373</b>	<b>162,843</b>	<b>169,167</b>	<b>162,843</b>
Indigenous supply	88,735	102,280	108,399	111,260	117,475	128,716	141,013	152,334	162,169	167,950	162,169
Gross new production <sup>1</sup>	116,082	131,626	136,655	138,630	144,987	158,037	171,005	183,467	192,514	197,337	192,514
Injected and stored	14,175	15,123	14,856	13,237	13,029	12,169	13,558	14,554	13,654	12,731	13,654
Net production	101,907	116,504	121,799	125,393	131,958	145,868	157,447	168,913	178,861	184,606	178,861
Transformed to LPGs and C5+ <sup>2</sup>	13,056	14,107	13,885	14,058	14,512	15,209	16,000	17,419	17,687	18,577	17,687
Adjustment	115	117	-485	76	-29	1,943	434	-840	-995	-1,921	-995
Imports	93	385	772	641	319	1,659	813	1,038	674	1,218	674
<b>Demand</b>	<b>88,850</b>	<b>102,834</b>	<b>109,938</b>	<b>110,285</b>	<b>118,240</b>	<b>132,115</b>	<b>141,189</b>	<b>152,142</b>	<b>164,001</b>	<b>168,958</b>	<b>154,272</b>
Domestic demand	60,841	66,921	72,026	69,597	70,552	74,218	78,173	80,739	84,851	88,841	79,972
Exports	28,009	35,913	37,912	40,689	47,688	57,897	63,017	71,403	79,150	80,117	74,300

1. Includes an estimate of producers' own consumption in the synthetic crude and heavy oil sectors.

2. Liquid petroleum gases (includes propane and butane) and C5+ (pentanes).

Source: Statistics Canada, Catalogue no. 57-601-XDE.

## 10.20 Natural Gas Sales in Canada

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
million cubic metres												
<b>Domestic sales</b>	<b>48,806</b>	<b>47,790</b>	<b>52,682</b>	<b>56,869</b>	<b>54,472</b>	<b>54,671</b>	<b>56,866</b>	<b>59,559</b>	<b>60,999</b>	<b>63,603</b>	<b>67,096</b>	<b>60,131</b>
Industrial	25,499	24,779	25,522	27,307	25,784	24,958	24,607	25,076	24,635	24,554	24,526	22,214
Residential	12,192	11,463	12,748	13,871	13,515	13,646	14,235	14,862	15,546	15,820	17,466	14,539
Commercial	10,362	9,728	10,737	11,496	11,201	11,259	11,456	11,535	11,534	11,582	12,558	10,326
Direct sales	754	1,820	3,674	4,195	3,972	4,808	6,568	8,087	9,284	11,647	12,545	13,052

Source: Statistics Canada, Catalogue no. 57-601-XDE.

**10.21 Nuclear Power Plants**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Number of reactors	18	18	18	18	19	19	20	22	22	22	21
<b>Capacity</b>											
Gross capacity (MW)	11,663.0	12,528.0	12,593.0	12,603.0	13,538.0	13,538.0	14,513.0	16,383.0	16,383.0	16,393.0	16,393.0
Net capacity (MW)	10,984.0	11,799.0	11,857.0	11,867.0	12,794.0	12,794.0	13,675.0	15,437.0	15,437.0	15,437.0	14,668.0
<b>Production</b>											
Gross production (GW.h)	71,267.0	77,261.5	82,866.6	79,871.6	72,966.8	84,929.6	80,582.3	93,937.1	107,833.9	97,844.1	92,767.1
Net production (GW.h)	67,233.0	72,888.2	78,176.0	75,350.6	68,836.6	80,122.3	76,021.0	88,620.0	101,730.1	92,305.8	87,516.2
Percent of total electricity generated (net)	14.8	15.1	16.0	15.6	14.8	16.4	15.2	17.3	19.1	17.3	16.0

Source: Statistics Canada, Catalogue no. 57-601-XDE.

**10.22 Value of Mineral Production, by Mineral Class**

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	\$ millions								
<b>All minerals</b>	<b>36,955</b>	<b>39,333</b>	<b>40,778</b>	<b>35,190</b>	<b>35,584</b>	<b>36,545</b>	<b>41,185</b>	<b>43,361</b>	<b>49,172</b>
Metals	13,608	13,982	12,500	10,462	10,210	8,871	9,750	12,173	11,753
Industrial minerals	5,574	5,566	5,289	4,783	4,473	4,459	5,193	5,429	5,292
Mineral fuels	17,773	19,785	22,990	19,945	20,901	23,214	26,243	25,759	32,127

Source: Natural Resources Canada, *Canadian Minerals Yearbook*, Ottawa, 1995.

## 10.23 Value of Mineral Production

	1990	1991	1992	1993	1994	1995	1996
	\$ millions						
<b>Canada</b>	<b>40,778</b>	<b>35,190</b>	<b>35,584</b>	<b>36,545</b>	<b>41,185</b>	<b>43,361</b>	<b>49,172</b>
Newfoundland	866	772	706	699	837	878	934
Prince Edward Island	3	3	2	4	3	4	3
Nova Scotia	459	460	523	554	608	560	597
New Brunswick	878	671	910	772	862	1,021	925
Quebec	3,037	2,930	2,694	2,692	2,956	3,337	3,320
Ontario	6,446	5,101	4,776	4,534	4,921	5,820	5,644
Manitoba	1,311	1,125	1,082	862	820	1,022	1,024
Saskatchewan	3,183	2,863	3,158	3,238	4,225	4,580	5,215
Alberta	19,111	16,373	17,056	18,925	21,119	20,676	26,039
British Columbia	3,954	3,840	3,500	3,538	4,066	4,501	4,248
Yukon Territory	542	349	496	141	86	196	423
Northwest Territories	988	703	681	585	680	766	798

Source: Statistics Canada, Catalogue no. 26-202-XPB.

## 10.24 Value of Canadian Mineral Production, by Mineral Class, 1996

	Total		Metals		Industrial minerals		Mineral fuels	
	\$ thousands	% of total	\$ thousands	% of total	\$ thousands	% of total	\$ thousands	% of total
<b>Canada</b>	<b>49,171,802</b>	<b>100.0</b>	<b>11,752,573</b>	<b>100.0</b>	<b>5,292,135</b>	<b>100.0</b>	<b>32,127,094</b>	<b>100.0</b>
Newfoundland	934,095	1.9	902,957	7.7	31,138	0.6	—	—
Prince Edward Island	3,395	—	—	—	3,395	0.1	—	—
Nova Scotia	597,472	1.2	—	—	205,899	3.9	391,573	1.2
New Brunswick	924,758	1.9	589,917	5.0	310,531	5.9	24,310	0.1
Quebec	3,319,996	6.8	2,183,670	18.6	1,136,326	21.5	—	—
Ontario	5,643,612	11.5	4,140,785	35.2	1,420,722	26.8	82,105	0.3
Manitoba	1,023,909	2.1	843,816	7.2	68,582	1.3	111,511	0.3
Saskatchewan	5,215,467	10.6	642,771	5.5	1,141,958	21.6	3,430,739	10.7
Alberta	26,039,407	53.0	348	—	486,442	9.2	25,552,617	79.5
British Columbia	4,248,218	8.6	1,526,486	13.0	462,894	8.7	2,258,839	7.0
Yukon Territory	423,069	0.9	400,328	3.4	3,760	0.1	18,981	0.1
Northwest Territories	798,403	1.6	521,496	4.4	20,489	0.4	256,419	0.8

Source: Statistics Canada, Catalogue no. 26-202-XPB.

## 10.25 Production of Canada's Ten Leading Mineral Commodities

	1990	1991	1992	1993	1994	1995	1996
Zinc (tonnes)	1,179,372	1,083,008	1,195,736	990,727	976,309	1,094,703	1,187,829
Copper (tonnes)	771,433	780,362	761,694	709,650	590,784	700,843	655,891
Gold (kg)	167,373	175,282	160,351	153,129	146,428	150,867	164,136
Nickel (tonnes)	195,004	188,098	177,555	178,529	141,974	172,107	184,548
Natural gas (million m <sup>3</sup> )	98,771	105,244	116,664	128,817	138,856	148,203	152,985
Crude petroleum (thousand m <sup>3</sup> )	90,279	89,788	93,256	97,306	110,452	114,372	116,832
Coal (kilotonnes)	68,332	71,133	65,612	69,029	72,824	74,920	75,950
Iron ore (kilotonnes)	35,670	35,421	31,582	33,228	36,416	36,628	36,030
Natural gas by-products (thousand m <sup>3</sup> )	23,863	24,919	26,735	30,163	22,666	25,040	25,882
Potash (kilotonnes)	7,345	7,087	7,040	6,880	8,517	8,855	8,165

Source: Natural Resources Canada.

## 10.26 Leading Minerals, 1996

	Production	Value
		\$ millions
<b>Metals</b>		
Gold (kg)	164,136	2,803.0
Copper (kilotonnes)	656	2,037.2
Nickel (kilotonnes)	185	1,958.2
Zinc (kilotonnes)	1,188	1,652.3
Iron ore (kilotonnes)	36	1,310.5
Uranium (tU)	11,448	645.8
Silver (tonnes)	1,228	280.5
Platinum group (kg)	14,234	146.2
Cobalt (kilotonnes)	2	168.4
Lead (kilotonnes)	246	261.6
<b>Non-metals</b>		
Potash (kilotonnes)	8,165	1,263.8
Salt (kilotonnes)	12,289	316.2
Asbestos (kilotonnes)	521	238.1
Peat (kilotonnes)	783	128.9
Sulphur (kilotonnes)	8,131	95.6
<b>Structural materials</b>		
Cement (kilotonnes)	11,050	931.5
Sand and gravel (kilotonnes)	217,898	778.3
Stone (kilotonnes)	86,057	552.6
Lime (kilotonnes)	2,491	212.3
Clay products (kilotonnes)	..	117.1
<b>Mineral fuels</b>		
Petroleum, crude (thousand cubic metres)	116,832	19,008.5
Natural gas (million cubic metres)	152,985	8,718.9
Natural gas by-products (thousand cubic metres)	25,882	2,456.5
Coal (kilotonnes)	75,950	1,943.1

Source: Statistics Canada, Catalogue no. 26-202-XPB.



**10.27 Gross Domestic Product at Factor Cost, Primary Industries**

	1992	1993	1994	1995	1996	1997
	\$ constant 1992 (millions)					
<b>All industries</b>	<b>604,275</b>	<b>619,194</b>	<b>643,063</b>	<b>655,088</b>	<b>665,277</b>	<b>691,361</b>
<b>Primary industries</b>						
Agricultural and related services industries	12,185	12,277	12,277	11,830	11,705	11,148
Fishing and trapping industries	893	851	851	801	927	1,058
Logging and forestry industries	4,133	4,304	4,304	4,422	4,247	4,218
Mining, quarrying and oilwell industries	28,099	27,002	27,002	26,223	25,200	23,745
Mining industries	7,135	7,184	7,184	7,035	6,563	6,601
Metal mines	4,737	4,925	4,925	4,718	4,353	4,598
Non-metal mines	1,399	1,278	1,278	1,369	1,293	1,122
Coal mines	89	94	94	100	103	101
Crude petroleum and natural gas	17,036	16,499	16,499	16,047	15,340	14,571
Quarry and sand pit industries	695	680	680	738	698	630
Services related to mineral extraction	3,233	2,639	2,639	2,403	2,599	1,943

Source: Statistics Canada, CANSIM, matrix 4677.

**10.28 Private and Public Capital Expenditures, Primary Industries**

	1993	1994	1995	1996	1997	1998 <sup>1</sup>
	\$ millions					
<b>Total private and public investment in Canada</b>	<b>121,253.9</b>	<b>130,131.2</b>	<b>127,802.8</b>	<b>135,271.2</b>	<b>151,792.0</b>	<b>161,161.8</b>
<b>Primary industries</b>	<b>12,529.4</b>	<b>17,774.2</b>	<b>18,641.4</b>	<b>19,273.0</b>	<b>23,008.1</b>	<b>24,205.5</b>
Agriculture and related services	3,250.1	3,326.0	3,508.3	3,743.9	4,075.3	4,372.6
Fishing and trapping	133.9	131.9	117.5	102.8	104.2	105.9
Logging and forestry	175.0	463.2	400.4	374.0	318.2	405.4
Mining, quarrying and oilwells	8,970.4	13,853.1	14,615.2	15,052.3	18,510.4	19,321.6
Gold	298.8	652.8	772.2	622.6	608.1	590.3
Iron	84.4	124.1	178.4	216.7	202.4	271.0
Other metal mines	716.9	603.1	1,065.4	1,145.6	1,196.9	981.3
Peat	4.2	13.7	10.8	14.5	13.4	11.5
Gypsum	12.2	13.4	22.5	20.5	13.8	25.8
Potash	90.2	83.9	82.2	104.6	166.3	129.3
Other non-metal mines	110.8	92.0	88.2	100.8	450.2	532.3
Coal	264.4	218.5	310.5	321.6	238.5	216.7
Crude petroleum and natural gas	7,308.6	11,787.8	11,912.8	11,623.3	14,471.0	15,381.1
Quarrying and sand pit	36.4	121.7	82.3	69.6	138.8	108.4
Services incidental to mineral extraction	43.4	142.1	89.9	812.4	1,011.0	1,073.9
Investment in primary industries as % of total investment	10.3	13.7	14.6	14.2	15.2	15.0

1. Data for 1998 are revised intentions published on July 23, 1998.

Source: Statistics Canada, CANSIM, matrices 3101 and 3102.

## 10.29 Employment in Selected Primary Industries

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>All industries<sup>2</sup></b>	<b>10,650,909</b>	<b>10,876,375</b>	<b>10,967,247</b>	<b>11,299,049</b>
<b>Logging and forestry</b>	<b>65,621</b>	<b>68,273</b>	<b>65,792</b>	<b>66,895</b>
Logging	46,252	48,636	47,309	48,742
Forestry services	19,369	19,637	18,483	18,152
<b>Mining, oilwells and quarrying</b>	<b>18,152</b>	<b>18,483</b>	<b>19,637</b>	<b>19,369</b>
Mining	143,404	131,239	134,379	137,053
Metal mines	55,656	51,072	51,592	50,205
Non-metal mines (except coal)	36,432	33,510	33,530	32,537
Coal mines	10,979	9,150	9,704	9,664
Crude petroleum and natural gas	8,245	8,412	8,357	8,003
Quarries and sand pits	36,289	34,939	35,807	35,771
Stone quarries	8,448	8,230	8,930	8,615
Sand and gravel pits	2,289	2,392	2,564	2,753
Services related to mineral extraction	6,159	5,838	6,366	5,862

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4285.

10.30 Average Weekly Earnings,<sup>1</sup> Selected Primary Industries

	1994	1995	1996	1997
	Average weekly earnings <sup>2</sup> \$			
<b>All industries<sup>3</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>
<b>Logging and forestry</b>	<b>733.88</b>	<b>735.30</b>	<b>768.63</b>	<b>793.12</b>
Logging	766.01	767.38	792.45	804.07
Forestry services	657.15	655.86	707.66	763.72
<b>Mining, oilwells and quarrying</b>	<b>960.83</b>	<b>991.43</b>	<b>1,039.08</b>	<b>1,057.61</b>
Mining	972.67	1,013.75	1,051.24	1,036.86
Metal mines	1,018.75	1,068.15	1,109.27	1,084.60
Non-metal mines (except coal)	830.51	845.53	871.52	910.50
Coal mines	956.98	990.84	1,015.54	994.15
Crude petroleum and natural gas	1,165.58	1,202.52	1,243.35	1,252.89
Quarries and sand pits	669.64	724.13	746.72	781.99
Stone quarries	680.10	789.13	778.35	778.99
Sand and gravel pits	664.73	697.95	733.75	783.11
Services related to mineral extraction	833.42	825.26	894.44	973.83

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4288.







### **C h a p t e r**

Eleven

*In 1997, when the Pathfinder spacecraft landed on Mars, two lightweight ramps automatically released onto the planet's surface like red carpets. Soon after, Sojourner Rover—a vehicle the size of a microwave oven—rolled down one of the ramps to begin its exploration of the so-called Red Planet. The ramps, which had to work reliably in temperatures as low as  $-110^{\circ}\text{C}$ , were designed and built in Canada.*





*Photo by Eugene Michael Finn, National Archives of Canada, PA-148586*

**Building the Québec Bridge, south of the city, early 1900s.**

Still in 1997, a massive platform for an offshore oil drilling operation was completed and moored 315 kilometres off the coast of Newfoundland. The platform, known as Hibernia, stands 224 metres high on dry land—more than 30 metres taller than the Calgary Tower. At full production, its crew is expected to harvest some 135,000 barrels of oil per day.

Whether it's a tiny ramp falling into place on a neighbouring planet or a huge platform pumping oil from below the Earth's surface, manufacturing and construction remain essential parts of Canadian industry. While the two sectors are distinct, manufacturing industries support construction and vice versa. The construction of Hibernia, for example, was dependent on tremendous amounts of manufactured concrete and steel. The flip side is also true. When an automobile manufacturer expands production, for instance, renovations are necessary, and occasionally, entirely new plants must be built; both scenarios mean more jobs for construction workers.

Manufacturing and construction have been awash in economic storms over the past decade. In 1990, after several years of increased production and steady job growth, the two sectors were severely racked by recession. Between 1989 and 1991, for example, the value of shipped manufactured goods dropped from \$309 billion to \$280 billion. In the same period, the value of private and public investment in residential housing—an important indicator of building activity in the construction sector—dropped from \$38 billion to \$33 billion.

Not surprisingly, many workers in both manufacturing and construction lost their jobs. Between 1989 and 1993, the number of manufacturing jobs dropped from more than 2.0 million to 1.6 million. In relative terms, the construction industry fared even worse. At the end of the 1980s, some 612,000 construction workers held down jobs. By 1993, nearly one-third of those jobs had disappeared.

Although both the manufacturing and construction sectors have now recovered, these lost jobs have not reappeared. In 1997, for example, 473,000 Canadians worked in construction—139,000 fewer than in 1989—and there were about 1.8 million workers in manufacturing—230,000 fewer than in 1989.

Economists refer to this as a “jobless recovery” and cite various reasons for the phenomenon. In the 1990s, as trade barriers have lifted around the world, the marketplace has become increasingly global in scope. This has created greater foreign competition for Canadian manufacturers, but also has led to new markets abroad. To compete, manufacturers have continued to invest in new technology and to seek more highly trained workers. As a result, there has been less need for unskilled labour.

The advance of technology also affects the kinds of construction jobs available. Computers now allow more components to be preassembled and prefabricated, so there is less need for skilled craftspeople on construction sites. On the other hand, many of these workers have found jobs in a burgeoning renovation market. A variety of other factors—from a glut of office tower vacancies to a lack of demand for residential housing—have also altered the landscape in construction.

## MANUFACTURING

A log passes through a sawmill and emerges as a wood product which is then used to make everything from houses to hockey sticks. Within 30 seconds, a gigantic shredding machine reduces an automobile to fist-sized chunks of scrap metal which are then recycled to make new steel products. The life cycle of manufacturing is no different: the producers take a natural resource or an existing product and turn it into new materials from which new products emerge.

In Canada, we process chemicals to make soap and paint. We smelt iron to make steel. We harness water to generate electric power and we use uranium to produce nuclear energy.

Statistics Canada has identified 22 major groups of manufacturing industries in Canada. These industries produce goods made from leather, rubber, plastic, wood, paper, metal and many other raw materials. In 1997, manufacturing output made up 18% of the Canadian economy and there were about 1.8 million Canadians at work in this sector.

The diverse materials and products of the manufacturing sector are influenced by the equally diverse effects of economic change.

During the 1990s, for example, Canadians drank less alcohol and that had a major impact on the beverage industry. Between 1988 and 1996, employment in beverages fell by more than 30%—from 33,000 jobs to 23,000.

Even the weather can have an effect. In 1992, a relatively wet summer was partly responsible for lower beer sales. In 1995, poor harvests in China, India and Pakistan created a cotton shortage, which drove up the price of American cotton. Clothing manufacturers went searching for cheaper substitutes, which pushed up the price of replacement materials. Canadian textile producers couldn't compete with foreign firms for the sought-after substitutes, so consumers in Canada purchased more imports and less Canadian-made clothing.

Each major manufacturing group is made up of various industries that follow particular trends and exhibit unique characteristics. The rubber industry, for example, focuses primarily on the production of tires for automobiles. But, because passenger tires now last longer, automobile tires represent a less important share of the industry's output. Between 1988 and 1995, for example, tire shipments dropped from nearly one-third of industry output to one-quarter, but shipments of rubber automotive parts and components almost quadrupled.



## Growth Patterns

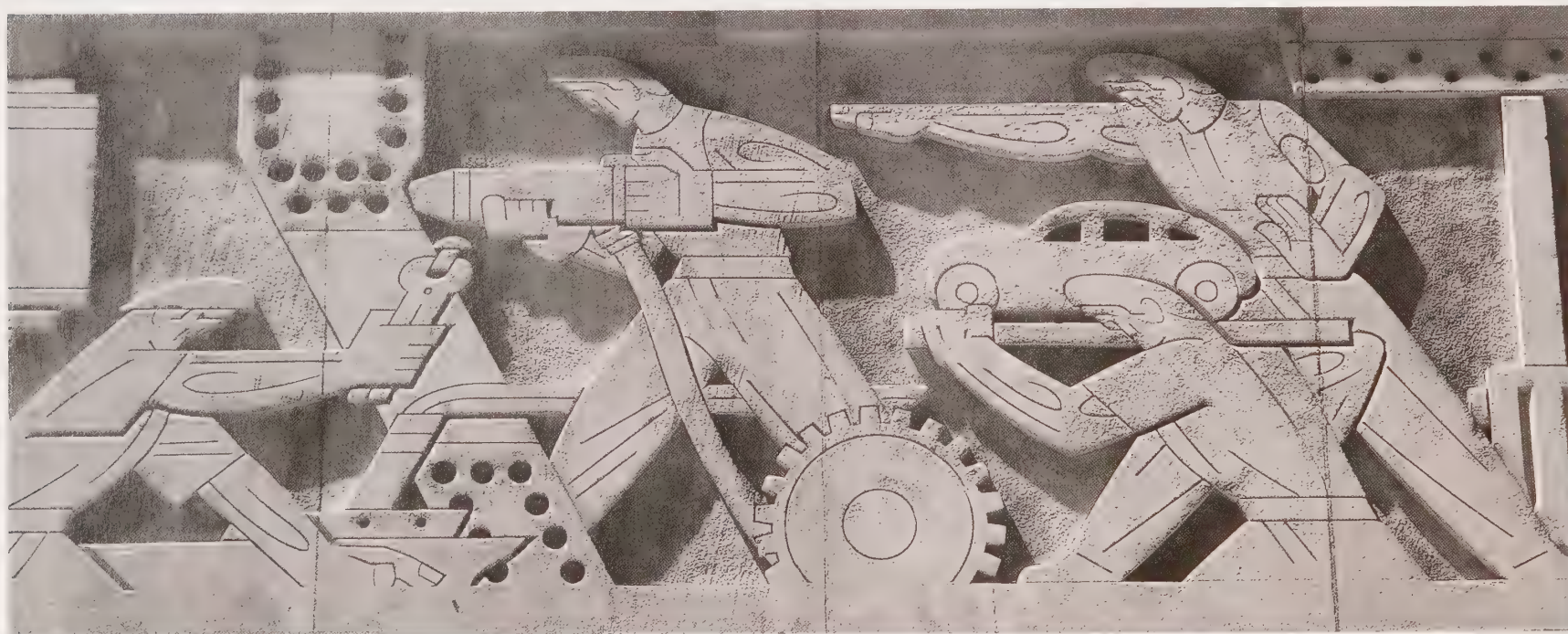
The late 1980s were halcyon days for Canadian manufacturers. In 1989, the industry was at the peak of a five-year run of solid growth. More than 2 million Canadians were working in the sector and the total value of goods shipped reached \$309 billion. Then came the recession. Between 1990 and 1991, the value of shipments dropped by about \$19 billion and nearly 197,000 people lost their jobs.

In 1992, however, things had once again picked up. In 1994, manufacturers recorded their strongest growth in 15 years, shipping \$353 billion worth of goods. The revival was the result of several develop-

ments. First, there was a dramatic (145%) increase in the price of pulp, and then, there was the economic recovery in the United States, which was good news for Canada's automobile exporters.

In addition, there was an upturn in the electrical and electronic products group. Between 1986 and 1995—except for a slight drop in 1990—this group outperformed all other manufacturing groups. In 1997, led by the production of cutting-edge computers, telecommunications equipment and electronic parts, the value of shipments topped \$29 billion—up \$9 billion from 1993.

On the surface, manufacturing workers have gained from all this. In 1996, average weekly pay was nearly \$717. Workers in the tobacco industry were



*Detail of a work by Charles Comfort (photo by Harthill Art Associates)*

**A frieze portrays workers in Canadian industry, part of the façade on the old Toronto Stock Exchange.**

the most highly paid, taking home nearly \$1,200 per week, while clothing workers earned the least: about \$423 a week.

However, while manufacturers are breaking shipment records, they are doing so with fewer employees. In 1992, for example, the value of shipments increased 2%, but employment fell 6%, bringing the number of employees in manufacturing to 1.6 million. From 1993 to 1995, the average growth rate for shipments was 11%, but employment grew less than 2%. By 1996, some 1.7 million Canadians were employed in manufacturing industries—about 290,000 fewer than in 1989.

Manufacturing recessions and recoveries



Source: Statistics Canada, CANSIM matrix 4670. (Rendered in terms of GDP at factor cost in 1986 dollars.)

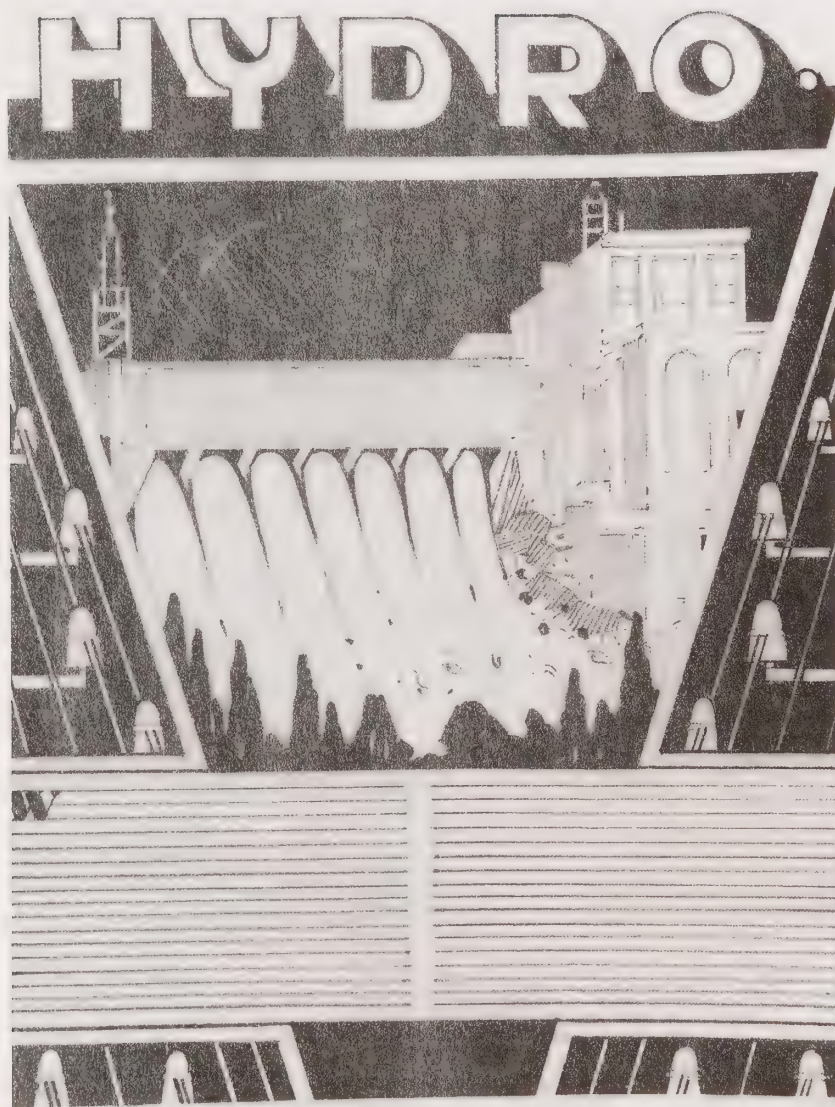
## Spirit of the Canoe

*It has been said that all the knowledge needed to build a canoe is contained within the tree itself. Certainly, for the First Nations of the Pacific Northwest, canoe building was a sacred act that required patience, respect and a sense of ceremony:*

*“Traditionally, a carver followed a disciplined regime. Before he began, he would prepare himself spiritually through fasting, prayer and sweatlodge. He would abstain from sexual relations and avoid combing his hair so that cracks would not develop in the canoe. After making a test hole with elbow adze and chisel to check for inside rot, the carver would fell the ancient cedar himself using hand tools, a formidable job. A prayer was then said for the cedar, and an offering of thanks was given for its sacrifice for the canoe builder and his family . . .”*

*Excerpted from The Great Canoes by David Neel, a member of the Fort Rupert Kwagiutl Nation.*





Work by Harold Abraham Pearle, National Archives of Canada, C-128204

Design for a poster advertising hydro power, ca. 1920.

One of the big economic changes occurring today is the shift from manufacturing to services, a trend that actually began in the early 1970s. For example, when economists measured the sectors' contribution to the Canadian economy between 1971 and 1981, they found that the manufacturing sector was contributing less, while the service sector was contributing more. This pattern continued into the early 1990s, although the decline of manufacturing was less pronounced than in the 1971–81 period.

In the 1990s, one of the real changes for manufacturers has been the shift from producing goods primarily for Canadian consumers to focusing on exports. In 1995, taking advantage of an increasingly global marketplace, manufacturers exported more than half of their shipments—the highest ratio of export to domestic shipments ever recorded. The paper products and transportation equipment industries, for example, exported 73% and 80% of their goods, respectively.

On the other hand, in 1997, exports declined as a result of a drop in automobile sales to the United States. There was also a 20% drop in sales of household items to Japan; they were no longer spending as much on these goods.

Another barometer of activity is the rate of capacity use, which measures the difference between what a plant can theoretically produce and what it actually does produce. At times during 1997, capacity rates reached 86%—the highest they had been in two years. During 1997, unfilled orders were as much as 13% higher compared with the year before and industry plans were in place to increase investment in equipment and machinery by 15%.

### Advanced Technologies

The introduction of computer design techniques and automated garment-pressing equipment has improved the efficiency and productivity of

## High Energy

*Canadians are prodigious producers of energy, but we also consume prodigiously: about 8 billion gigajoules a year. To put that into perspective, one 30-litre fill-up at the gas station contains about one gigajoule of energy. In 1995, more than half of our energy went towards commercial and industrial use. Another 25% went towards transportation. The rest went to our homes.*

*About two-thirds of the energy we use in Canada today comes from petroleum and natural gas. Coal provides another 11%, while renewable sources such as wind, water and wood provide 4%. The balance comes from electricity, of which there are basically three kinds. Hydro-electric power, which comes from the flow of water,*

*accounts for most of the electric power we produce: 65%. Thermal power uses heat from fossil fuels like coal and petroleum, and it provides us with 21%. Nuclear power uses energy drawn from uranium and it contributes 14% of our electric power.*

*As the 1990s draw to a close, we may see an increase in the use of thermal power as Canada's nuclear sources decline. In 1997, Ontario announced it would shut down two of its five nuclear plants. Together, these five plants have been producing about 93% of Canada's nuclear-generated electricity.*

*Historically, we can define many of our major eras by the type of energy we used. In the 1800s, wood provided about 85% of the nation's energy needs. Wind propelled*

*sailing ships and flowing water helped move logs along rivers. Animals, fed on hay and oats, helped farmers plough the fields. By the 1900s, as Canada industrialized, coal was used to fuel steam engines in factories and trains. As late as 1945, coal supplied over half of Canada's overall energy needs. By the 1950s, however, oil, gas and electric power had emerged as the most important energy sources.*

*Since 1969, we have been able to sell our energy to great advantage: in 1996, exports of natural gas, petroleum and electricity generated almost \$26 billion. Energy accounted for about 12% of Canada's total merchandise exports.*

*In 1996, the energy sector provided work*

*for 300,000 people and contributed 7% to the gross domestic product (GDP)—the total value of goods and services produced by the country.*

*In 1901, the first electric power transmission line at Niagara Falls allowed Canada to market its hydro-electric power south of the border. This set the stage for the creation of a more formal electricity exchange between Canada and the United States, which was put in place in the 1960s.*

*The North American power grid, as it is known, is a complex arrangement of interconnected transmission lines, power plants, controls and switches that helps Canadian and American utility companies keep power flowing during peak periods, or*

*in a crisis. During the severe winter of 1976, for example, Michigan bought electricity from Ontario and several other provinces. A few days later, the flow was reversed: Ontario sought power from North Carolina. Six weeks later, during another cold snap, Ontario sent vast amounts of electricity to Michigan.*

*Canada continues to benefit from the creation of this grid. Since the late 1980s, revenue from our energy exports to the United States has been increasing. This is due to the rising demand for energy there, a favourable exchange rate, and a more competitive environment for the electric power industry in the United States and Canada.*

*In 1996, for example, Alberta introduced legislation allowing open competition for the generation of electricity. This will make it easier to import and export electricity which, in the long term, is expected to reduce costs for consumers. Similarly, in 1997, Ontario released its plan to open the province's electricity market to competition by 2000.*

*The competition may put extra stress on the grid. As prices fall, there may be even more consumption and more power transactions, all of which will affect the grid's stability. In the late 1990s, there have been calls to upgrade the infrastructure, much of which consists of equipment designed in the 1950s and 1960s.*



manufacturing in Canada tremendously. It's no longer unusual to see a robot gripping a welding torch on an automobile assembly line or to have a computer-based program direct the cutting of fabric for clothes. Canadians are investing in new construction machinery and equipment to modernize plants and improve productivity. Between 1983 and 1990, for example, investment climbed from 7% to 10% of total manufacturing production. In 1993, some 60% of manufacturing establishments used at least one advanced computer-based technology, up from 48% in 1989.

Advanced technologies can have a dramatic impact on production and labour. Between 1989 and 1994, for example, the clothing industry lost 32,000 jobs—a drop of 28.0% compared with an 11.5% decline for manufacturing overall. Partly, this was due to increased competition and the recession, but advanced technologies also played a role. Today, industry needs fewer unskilled labourers and the remaining workers must be highly trained. In 1993, nearly half of all clothing firms using advanced technologies actually reported a shortage of skilled workers.

### Small Manufacturers

When people think of manufacturing, often the large factories come to mind first. But small manufacturers—from the bakery to the local print shop—also make important contributions to the economy. In fact, it's the smaller firms (those with fewer than 100 employees) that create most new manufacturing jobs. In the early 1990s, for example, small plants accounted for 39% of total employment, up from 29% in 1973, and the proportion of production workers employed by small firms jumped to 45%. But people in these jobs generally don't earn as much as workers in larger firms, either because the hourly wage rate is lower or because they work fewer hours.



*Work by Louis Muhlstock, National Gallery of Canada*

**Welder**



## Canadian Footnote

*In the mid-19th century, the high quality of Canadian rubber boots came to the attention of the emperor of France, Napoleon III. In 1855, the firm of Brown, Hibbard, Bourn & Co. —the first makers of Canadian rubber footwear—received a diploma of excellence at the Exposition Universelle in Paris, France.*

*The firm's product line was aimed at men, women and children and included buskins, moccasins and overshoes, as well as flat-heeled sandals and slippers. As one writer put it, "women in those days were content to walk on such feet as Heaven had vouchsafed to them, and had not learned to resort to French heels and Cuban heels for the purpose of subtracting from the length of their feet to add to their stature. They wore heel-less shoes and, naturally, rubbers to fit them were also made heel-less."*

*Women were clearly an important market for the company. An early ledger entry shows a shipment bound for Hamburg, Germany containing 192 pairs of men's overshoes, 240 pairs of ladies' half slippers and 1,574 pairs of ladies' overshoes.*

## Provincial Dimensions

When all the receipts are tallied for the value of goods manufactured in Canada, we find that most industrial activity is based in Ontario. In 1996, Canada produced \$401 billion worth of goods; some 50% were manufactured in Ontario. In 1995, there were 1,400 transportation equipment plants in Canada: half of them were in Ontario and employed three-quarters of all industry employees.

Nonetheless, nearly every province has one industry that overshadows the rest. British Columbia and parts of the Maritimes are known for their trees, so not surprisingly, in 1995, nearly one-third of British Columbia's manufacturing activity revolved around wood products, while paper-related products accounted for 30% of New Brunswick's manufacturing.

Alberta is known for its vast oil reserves, which cover an area of 77,000 square kilometres—roughly the size of New Brunswick. However, in 1995, the refinement of petroleum accounted for only 15% of the province's manufacturing activity, ranking third in importance after its chemical and food industries.

Quebec, which is second only to Ontario as a centre for manufacturing, has the most diversified manufacturing base in the country. While other provinces tend to be dependent on one or two major industries, Quebec's economy extends to many different areas. In 1995, for example, paper-related products formed the province's biggest industry, but accounted for only 12% of the province's manufacturing activities.

## CONSTRUCTION

Much like the manufacturing industries, construction in Canada flourished during the boom years of the late 1980s. Between 1985 and 1989, for example, the number of people working in construction increased from



*Photo by Ted Grant*

**Cutting steel.**

## *Tiger's Lair*

*A "pioneer's log cabin" often conjures up images of a family or group of people living in very cramped quarters.*

*However, the log cabin home of William 'Tiger' Dunlop—the founder of Goderich, Ontario in 1827—was more like a log mansion. Below, a passage from *In the Days of the Canada Company* describes Dunlop's house, known as Gairbraid:*

*"Gairbraid was built of solid oak logs, the house in form somewhat like the letter H . . . At Gairbraid, the two rooms most characteristic of the times and of the occupants were the dining-room and kitchen. In the former stood a large, round dining-table of solid mahogany, fitted to seat twelve persons; and ranged round the room were twelve most solid chairs to match, upholstered in Brussels carpet . . .*

475,000 to 612,000. Another way to measure the growth of the industry is to examine its gross domestic product (GDP) at factor cost—the value of construction activity before production costs are included. In 1989, using this measurement, the construction industry contributed nearly \$33 billion to the Canadian economy—its highest amount ever.

However, the recession of the early 1990s took its toll on construction just as it did on manufacturing. Even as the economy began to pick up in the mid-1990s, the construction industry lagged behind. While there was a revival in residential construction, there was a decline in other areas such as office towers. In 1996, the overall value of the industry was close to \$27 billion—down 18% from 1989, and the number of people working in construction numbered about 456,000—down 26%.

In 1997, the Canada Infrastructure Works program was renewed. The original program—launched as a joint federal–provincial–municipal initiative in 1995—injects about \$6.8 billion into municipal infrastructure programs, creating some 106,000 temporary jobs. In 1997, a second phase made another \$938 million available for the construction of more sewers, roads and bridges, recreation centres and other types of buildings.

### **Non-residential Building Construction**

The non-residential building sector includes everything from office towers and factories to schools and hospitals.

Throughout the 1990s, construction in this area has declined dramatically. Vacancy rates remain high in office buildings across the country, providing little incentive for new construction. In 1995, the industry constructed \$2.5 billion worth of office buildings—less than half of what was built in 1992. At the same time, the building of new shopping centres has also declined.

There is a high note, however. Since 1992, spending on indoor recreation centres has more than doubled—from \$469 million to more than



\$1 billion in 1995. (Commercial builders are benefiting from the transformation of many movie theatres into multimedia entertainment centres with cinemas, theme restaurants, motion simulator rides and interactive virtual reality games.)

Industrial construction, too, has fared well. In the late 1990s, the high value of the yen led Japanese automakers to locate more of their plants offshore, including Canada. Consequently, manufacturers became increasingly involved in the research and development of entire systems: from interiors to steering columns. All this activity led to more industrial construction. In 1995, some \$1.9 billion was spent on building manufacturing plants—up \$300 million from just three years before.

Government policy and demographics tend to affect institutional construction more than do business cycles. Consequently, spending remains relatively steady. Between 1992 and 1995, for example, spending levels increased only marginally: from \$4.5 billion to \$5.0 billion.

While spending may not fluctuate dramatically, the types of buildings that go up often change to suit the times. In the late 1960s, for example, to meet the needs of the baby boom generation, construction focussed on schools and hospitals. In the 1990s, attention has turned to seniors' homes and extended care facilities. In the late 1990s, partly in response to increased privatization, major renovations and expansions were underway at several airports including Dorval Airport in Montréal and the Vancouver International Airport. Other such projects included the expansion of the Metro Convention Centre and the National Trade Centre, both in Toronto.

## Engineering Construction

With its dependence on large infrastructure projects, engineering construction is the least cyclical of all sectors. From planning to completion, these mega projects can last up to a decade. In the process, they often span

*The huge fireplace in the end of the room was flanked by large walnut presses, wherein a wealth of china, silver and glass was stored . . . In front of the fire was an apparatus, in appearance something like a fender-stool, where plates and hot meats were placed for warmth; for the Dunlopian sense of comfort was well developed . . .*

*On summer evenings, the friends would gather at the low windows and look at the lovely view framed in by vines which grew luxuriantly in the new-turned earth, or in winter before a fiery cone of twenty sound maple logs which bade defiance to Canadian cold; or, drawn up by the round table, read the last arrived numbers of *Maga*, *Fraser's*, or *The Times* (all six or eight weeks on the way), which were like handshakes across the ocean from that Britain of blue coats and brass buttons which these emigrants had left behind."*



## *The Iglu*

*The art of building an igloo—or an iglu as it is called in Inuit—is still very much alive in Canada's Far North. In the middle of a Baffin Island blizzard, the skill to fashion a shelter from snow could mean the difference between life and death.*

*In some Arctic areas, an igloo is the perfect temporary shelter, even in 1998. The building materials are plentiful and free and the structure recycles itself each summer. Igloos might be used three or four times a year by hunters on extended trips, or quickly thrown up as refuge in the event of a mechanical breakdown or a sudden snowstorm.*

*There are modern alternatives to igloos. Tents, for instance, are now in wide use. But*

*the old hands prefer the igloo, and it has nothing to do with nostalgia. Experts in this type of construction believe that even thermal-layered tents designed for extreme cold weather conditions can't hold heat as well as an igloo.*

*Snow is an excellent insulator. It works so well, in fact, that the igloo's thermal efficiency contributes to its short life span. For example, when body heat and camp stoves push the temperature inside an igloo to around the 20°C mark, the walls become soft. If the temperature then drops inside the igloo—as it would if someone left for a few hours—the inside walls will freeze and form a crust of ice. The next time the igloo is warmed, the ice will melt. The result: a*

*rainshower at -40°C.*

*For this reason, most igloos are used only once, but if one is to be home base for a number of days, it's lined with canvas to protect the walls from overheating.*

*It takes about two hours to build a good-sized igloo and all that's needed is an ordinary wood saw. A small igloo is perhaps two to three metres in diameter; a larger igloo is four or five metres across, with enough headroom for adults to stand upright.*

*“Igloo” is a more generic term than southerners realize. In the Inuit language, any shelter can be referred to as an iglu, including a modern house. Of course, one wouldn't want to confuse an iglu with a*

*qamaq, which is also a northern-style shelter, made from sod. Even though igloos are still frequently used, they don't show up in any formal housing statistics. Of the 124,713 official housing starts in Canada in 1996, not a single one could boast a roof—or floor or walls—made of snow.*

*The skills of igloo construction are not in immediate danger of being lost. They are still being taught by the elders in the more northern regions of Canada, and there are even formal courses offered in some northern high schools and colleges. At Nunuvut Arctic College in Iqaluit, for instance, Iglu Building is offered as a credit course in the Language and Culture program.*

more than one business cycle. The sheer scope of these projects ensures that this sector surpasses others in dollar value. In 1995, for example, the \$13.5 billion invested in oil and gas projects alone was more than the amount spent on both commercial and industrial construction. In the same year, with the addition of roads and highways, electric power and waterworks, engineering projects accounted for \$30.6 billion worth of construction activity.

In 1997, two major projects were completed on the east coast: the Hibernia offshore oil platform and Confederation Bridge, the fixed link between Prince Edward Island and New Brunswick. In the west, expansions were expected in the Alberta oil sands and producers anticipated that spending in the oil sands might reach \$25 billion over 25 years.

Housing starts and mortgage rates in Canada



Source: Statistics Canada, CANSIM, matrix 2560.

## Residential Construction

Except for a brief burst of activity between 1993 and 1994, the residential construction sector has been in decline for much of the 1990s. This is partly due to the demographics. In the 1970s and 1980s, when the baby boomers were starting their families, housing starts (the number of new homes built) reached as high as 250,000 a year. In 1995, the actual number of units constructed was only 111,000.

For the latter half of the 1990s, the Canada Mortgage and Housing Corporation predicts that between 140,000 and 176,000 new units will have to be built annually to satisfy housing needs. The housing industry says that every 50,000 new units would create 120,000 construction jobs.

Residential construction has a ripple effect on many aspects of the Canadian economy, particularly manufacturing. For example, when Canadians are buying single family homes, the demand for clay brick, cement products and ready-mix concrete increases. Likewise, activity in the manufacturing industries affects construction. In the late 1990s, innovative technology has helped create preassembled products ranging from hardwood floors to circular staircases and kitchen cabinets. For new construction (or the part of the industry dedicated to building new structures), this means there is no longer the need for painstaking craftsmanship and carpentry work on a housing construction site. However, many of these skills are still needed to make improvements to homes, cottages and other residential buildings.

Repairs and renovations, in fact, are a major component of the residential sector. In 1996, Canadian home-owners spent \$12 billion on renovations to their principal residences—about the same as the year before. An additional \$3 billion went to renovate other buildings like cottages and rental units.

## SOURCES

Canada Mortgage and Housing Corporation  
Industry Canada  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Canadian Economic Observer.** Monthly. 11-010-XPB
- **Monthly Survey of Manufacturing.** Monthly. 31-001-XPB
- **Manufacturing Industries of Canada: National and Provincial Areas.** Annual. 31-203-XPB
- **Products Shipped by Canadian Manufacturers.** Annual. 31-211-XPB
- **Building Permits.** Annual. 64-203
- **Homeowner Repair and Renovation Expenditure.** Annual. 62-201-XPB
- **Perspectives on Labour and Income.** Quarterly. 75-001-XPE



## Manufacturing and Construction

### Legend

-	nil or zero	..	not available	x	confidential
--	too small to be expressed	...	not applicable or not appropriate	(Certain tables may not add due to rounding)	

### 11.1 Gross Domestic Product at Factor Cost, Manufacturing and Construction

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
\$ constant 1992 (millions)												
<b>All industries</b>	<b>548,405</b>	<b>569,537</b>	<b>594,891</b>	<b>607,564</b>	<b>609,231</b>	<b>600,004</b>	<b>604,275</b>	<b>619,194</b>	<b>643,063</b>	<b>655,088</b>	<b>665,277</b>	<b>691,625</b>
<b>Manufacturing</b>	<b>94,829</b>	<b>99,215</b>	<b>105,126</b>	<b>106,612</b>	<b>102,570</b>	<b>94,999</b>	<b>96,181</b>	<b>101,877</b>	<b>108,403</b>	<b>113,740</b>	<b>114,942</b>	<b>121,999</b>
Food	12,310	12,276	12,196	11,786	12,022	12,288	12,472	12,532	12,964	13,257	13,699	14,103
Beverages	2,981	3,056	3,315	3,169	3,074	3,023	3,152	3,183	3,283	3,246	3,177	3,208
Tobacco products	1,158	1,250	1,268	1,242	1,122	1,077	983	938	1,078	999	982	933
Rubber products	1,191	1,211	1,327	1,283	1,265	1,154	1,396	1,636	1,755	1,914	1,917	2,021
Plastic products	2,136	2,415	2,550	2,488	2,448	2,352	2,430	2,665	2,929	3,055	3,293	3,512
Leather and allied products	690	646	611	586	498	394	393	397	408	360	331	357
Primary textile	1,291	1,279	1,259	1,228	1,054	1,019	1,060	1,105	1,223	1,306	1,387	1,519
Textile products	1,306	1,407	1,357	1,358	1,271	1,140	1,002	1,029	1,094	1,116	1,102	1,204
Clothing	3,097	3,259	3,178	3,154	2,971	2,644	2,570	2,578	2,620	2,724	2,529	2,697
Wood	4,840	5,549	5,720	5,673	5,286	4,644	4,889	5,228	5,420	5,400	5,671	6,031
Furniture and fixtures	2,141	2,162	2,161	2,188	2,004	1,651	1,646	1,772	1,970	2,067	2,189	2,565
Paper and allied products	5,979	6,172	6,207	6,028	5,937	5,576	5,783	6,175	6,505	6,621	6,593	6,769
Printing, publishing and allied industries	8,264	8,278	8,697	8,827	9,007	7,706	7,329	7,077	7,064	7,010	6,876	7,159
Primary metals	4,909	5,266	5,534	5,487	5,126	5,083	5,293	6,015	6,127	6,307	6,523	6,753
Fabricated metal products	7,188	7,648	7,849	8,260	7,785	6,873	6,422	6,618	7,404	7,861	7,959	8,610
Machinery (except electrical machinery)	4,950	4,903	5,443	5,553	5,004	4,052	3,800	4,513	5,240	6,055	5,934	6,615
Transportation equipment	12,731	12,618	15,028	15,901	14,779	13,300	13,695	15,842	17,280	18,483	18,682	19,826
Electrical and electronic products	5,198	5,862	6,622	7,147	6,900	6,797	7,142	7,080	7,815	9,094	9,027	10,057
Non-metallic mineral products	3,238	3,576	3,642	3,473	3,196	2,639	2,547	2,604	2,701	2,791	2,847	3,051
Refined petroleum and coal products	738	822	896	961	1,001	966	975	1,024	1,039	1,050	1,111	1,131
Chemical and chemical products	7,395	7,847	8,181	8,617	8,767	8,072	8,261	8,877	9,267	9,617	9,644	10,279
Other manufacturing industries	2,819	3,001	3,277	3,175	2,982	2,990	2,941	2,989	3,217	3,407	3,469	3,599
<b>Construction</b>	<b>38,241</b>	<b>40,146</b>	<b>41,244</b>	<b>43,288</b>	<b>43,503</b>	<b>40,165</b>	<b>37,112</b>	<b>35,541</b>	<b>37,293</b>	<b>35,397</b>	<b>36,412</b>	<b>39,062</b>
Residential construction	13,152	14,098	13,587	13,938	13,058	11,287	11,381	11,287	11,713	10,029	10,841	12,479
Non-residential building construction	8,198	9,014	9,528	10,239	10,100	8,935	7,471	6,624	6,603	6,540	6,783	6,895

Source: Statistics Canada, CANSIM, matrix 4677.

11.2 Private and Public Capital Expenditures,<sup>1</sup> Manufacturing and Construction

	1993	1994	1995	1996	1997	1998
	\$ millions					
<b>Private and public investment in Canada</b>	<b>121,253.9</b>	<b>130,131.2</b>	<b>127,802.8</b>	<b>135,271.2</b>	<b>151,792.0</b>	<b>161,161.8</b>
<b>Total manufacturing and construction</b>	<b>15,658.7</b>	<b>16,534.2</b>	<b>18,597.2</b>	<b>20,239.1</b>	<b>21,374.0</b>	<b>21,741.0</b>
Manufacturing	13,777.6	14,529.0	16,735.1	18,247.3	19,148.2	19,346.7
Food and beverages	1,438.1	1,390.8	1,452.2	1,764.6	1,458.3	1,508.6
Tobacco products	..	..	..	88.8	120.8	168.3
Rubber products	186.8	155.5	209.9	164.1	251.4	185.3
Plastic products	275.0	380.8	405.6	457.6	365.7	461.4
Leather and allied industries	..	..	..	20.9	20.5	18.7
Primary textiles	170.5	172.1	172.4	316.6	285.4	226.6
Textile products	108.8	117.8	61.1	86.0	95.7	101.8
Clothing	75.9	145.6	100.3	100.2	119.4	107.6
Wood	692.6	1,134.5	1,586.6	1,146.9	922.7	842.5
Furniture and fixtures	81.7	100.5	107.7	123.8	174.1	264.3
Paper and allied products	2,241.4	2,100.4	3,637.6	3,213.1	2,887.1	2,594.0
Printing and publishing	501.1	503.5	404.2	571.5	553.8	407.6
Primary metals	1,009.0	670.3	1,118.3	1,534.9	2,086.4	1,754.4
Fabricated metal products	369.9	470.3	572.8	755.4	788.0	828.3
Machinery	253.3	484.1	419.9	469.1	406.5	551.2
Transportation equipment	2,991.9	3,507.8	3,684.5	4,179.7	4,870.2	4,658.5
Electrical and electronic products	719.5	714.0	655.9	806.8	735.2	822.8
Non-metallic mineral products	236.2	358.0	414.3	372.4	431.0	555.8
Refined petroleum and coal products	393.4	323.0	291.9	426.8	349.8	440.5
Chemical and chemical products	1,723.0	1,310.8	1,141.3	1,344.2	1,948.2	2,551.3
Other industries	237.6	416.1	213.3	303.6	278.0	297.0
Construction	1,881.1	2,005.2	1,862.1	1,991.8	2,225.8	2,394.3
	%					
Investment in manufacturing and construction as a percentage of total investment	12.9	12.7	14.6	15.0	14.1	13.5

1. Data for the latest year shown are Intentions. These are updated to Revised Intentions in late July.

Source: Statistics Canada, CANSIM, matrices 1190 and 3103.

## 11.3 Manufacturing Shipments, Orders and Inventories

	1992	1993	1994	1995	1996	1997
	\$ constant 1992 (millions)					
Shipments	286,018	299,718	324,322	343,534	350,064	373,367
New orders	287,175	303,236	325,788	343,581	350,180	380,330
Unfilled orders	25,376	26,778	28,780	30,703	29,717	33,025
Inventories	36,348	35,475	36,171	39,268	40,225	43,400
	number					
Inventory-to-shipment ratio	1.53	1.42	1.34	1.37	1.38	1.40

Source: Statistics Canada, CANSIM, matrix 186.

## 11.4 Employment in Manufacturing and Construction

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>All industries<sup>2</sup></b>	<b>10,591.6</b>	<b>10,815.9</b>	<b>10,907.4</b>	<b>11,204.3</b>
<b>Manufacturing</b>	<b>1,654.8</b>	<b>1,697.2</b>	<b>1,737.7</b>	<b>1,800.4</b>
Non-durable goods	761.5	766.0	774.9	796.3
Durable goods	893.3	931.3	962.8	1,004.1
Food	181.0	182.7	188.5	190.9
Beverages	25.8	25.1	22.5	24.6
Tobacco products	4.5	4.4	4.4	4.6
Rubber products	22.1	22.0	23.8	24.2
Plastic products	50.3	52.0	57.6	64.3
Leather and allied products	11.8	11.9	11.8	11.9
Primary textiles	18.8	19.8	19.7	19.7
Textile products	28.1	25.8	28.0	31.4
Clothing	83.8	84.3	85.0	87.9
Wood	114.6	115.5	123.2	131.0
Furniture and fixtures	47.7	47.4	50.4	57.7
Paper and allied products	99.5	99.7	98.9	99.2
Printing, publishing and allied industries	140.7	144.9	140.1	141.4
Primary metals	80.8	84.6	83.7	81.2
Fabricated metal products	143.5	146.3	154.0	165.3
Machinery	74.9	83.6	89.4	94.5
Transportation equipment	207.8	213.8	223.3	224.1
Electrical and electronic products	113.6	118.8	117.3	121.0
Non-metallic mineral products	41.8	44.9	44.1	46.8
Refined petroleum and coal products	13.1	12.1	12.6	12.1
Chemical and chemical products	81.8	81.3	82.0	84.1
Other manufacturing	68.4	76.3	77.4	82.6
<b>Construction</b>	<b>450.9</b>	<b>455.0</b>	<b>455.5</b>	<b>472.7</b>
Building, developing and general contracting	101.4	97.1	96.8	100.2
Residential building and development	68.4	66.3	65.3	68.8
Non-residential building and development	33.0	30.9	31.4	31.4
Industrial and heavy (engineering) construction	65.5	66.2	65.8	64.6
Trade contracting	268.1	272.8	273.5	290.1
Services incidental to construction	15.9	18.9	19.4	17.7

1. Excludes owners or partners of unincorporated business and professional practices, the self-employed, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T-4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4285.

## 11.5 Employment in Manufacturing and Construction, 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Employees <sup>1</sup> (thousands)													
<b>All industries<sup>2</sup></b>	<b>11,299.0</b>	<b>144.9</b>	<b>45.9</b>	<b>314.9</b>	<b>253.1</b>	<b>2,700.6</b>	<b>4,422.8</b>	<b>425.0</b>	<b>335.3</b>	<b>1,162.2</b>	<b>1,454.9</b>	<b>14.2</b>	<b>25.3</b>
<b>Goods-producing industries</b>	<b>2,606.4</b>	<b>25.7</b>	<b>8.8</b>	<b>59.3</b>	<b>55.7</b>	<b>664.7</b>	<b>1,093.1</b>	<b>82.5</b>	<b>54.8</b>	<b>263.4</b>	<b>291.8</b>	<b>2.2</b>	<b>4.3</b>
Logging and forestry	66.9	1.9	x	2.4	4.9	16.4	8.1	0.6	1.1	2.3	28.8	x	x
Mining, quarrying and oil wells	143.4	2.8	..	3.1	3.2	15.5	21.2	3.9	10.1	68.1	12.7	x	x
Manufacturing	1,800.4	12.8	5.6	36.9	32.0	503.9	850.4	57.5	25.2	109.8	165.8	x	x
Non-durable goods	796.3	10.3	3.8	23.9	20.4	257.8	328.3	25.4	12.0	46.2	67.9	x	x
Durable goods	1,004.1	2.5	1.9	13.0	11.6	246.1	522.1	32.1	13.2	63.7	97.9	x	x
Construction	472.7	5.2	2.8	14.0	11.9	100.0	162.1	14.3	14.5	71.4	73.9	x	x
<b>Service-producing industries</b>	<b>8,597.9</b>	<b>118.1</b>	<b>36.7</b>	<b>254.3</b>	<b>195.3</b>	<b>2,010.8</b>	<b>3,296.8</b>	<b>339.6</b>	<b>276.1</b>	<b>887.9</b>	<b>1,149.9</b>	<b>11.8</b>	<b>20.7</b>
Transportation, communications and other utilities	851.4	13.4	3.0	24.5	22.1	196.2	313.2	42.6	27.5	92.7	112.5	1.5	2.4
Trade	2,124.4	28.8	7.8	62.2	48.9	505.3	827.1	77.1	66.3	221.8	273.8	1.8	3.4
Finance, insurance and real estate	704.2	6.9	2.1	17.0	12.3	154.5	310.3	26.4	23.1	61.1	89.1	0.5	0.9
Community, business and personal services	4,366.6	56.3	18.5	126.7	95.0	1,014.6	1,660.6	170.6	138.0	460.3	612.5	4.7	8.6
Public administration	674.3	15.6	5.5	26.7	20.8	169.2	237.0	29.1	25.1	63.7	72.5	3.5	5.7

1. Excludes owners or partners of unincorporated business and professional practices, the self-employed, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrices 4285, 4299, 4313, 4327, 4341, 4355, 4369, 4383, 4397, 4411, 4425, 4439 and 4453.



## 11.6 Earnings in Manufacturing and Construction

	1994	1995	1996	1997
	Average weekly earnings <sup>1</sup> \$			
<b>All industries<sup>2</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>
<b>Manufacturing</b>	<b>685.84</b>	<b>694.58</b>	<b>716.62</b>	<b>736.69</b>
Non-durable goods	641.61	650.98	666.23	680.89
Durable goods	723.55	730.44	757.17	780.94
Food	568.74	575.58	592.94	598.89
Beverages	769.65	755.81	769.81	775.20
Tobacco products	1,141.55	1,153.45	1,180.23	1,199.55
Rubber products	714.85	705.57	678.99	746.09
Plastic products	573.53	574.28	605.68	603.05
Leather and allied products	420.15	435.75	473.28	468.55
Primary textiles	655.56	681.59	669.62	667.05
Textile products	462.14	495.66	533.60	556.49
Clothing	382.74	397.82	423.21	434.37
Wood	619.01	633.74	680.42	685.69
Furniture and fixtures	536.45	534.91	562.42	574.06
Paper and allied products	869.86	898.87	914.15	930.15
Printing, publishing and allied industries	612.45	624.85	641.38	667.40
Primary metals	876.10	896.15	926.25	954.76
Fabricated metal products	649.99	667.52	701.50	728.75
Machinery	721.22	737.18	776.53	807.97
Transportation equipment	843.34	847.98	860.27	897.62
Electrical and electronic products	756.13	741.44	754.38	798.28
Non-metallic mineral products	702.77	719.06	748.55	758.24
Refined petroleum and coal products	1,090.97	1,108.76	1,094.59	1,100.97
Chemical and chemical products	812.92	805.52	819.71	857.89
Other manufacturing	600.35	588.22	623.09	650.13
<b>Construction</b>	<b>664.00</b>	<b>680.59</b>	<b>695.67</b>	<b>711.35</b>
Building developing and general contracting	624.29	617.10	644.86	673.19
Residential building and development	559.78	567.16	580.92	608.48
Non-residential building and development	757.99	724.29	777.67	814.88
Industrial and heavy (engineering) construction	806.38	835.06	849.51	874.65
Trade contracting	645.06	666.94	674.32	685.73
Services incidental to construction	650.28	662.64	728.01	751.64

1. Includes overtime.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4288.

## 11.7 Value of Shipments of Goods of Own Manufacture, by Industry

	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions								
<b>Manufacturing industry, total</b>	<b>308,986.4</b>	<b>299,195.2</b>	<b>280,503.9</b>	<b>286,293.1</b>	<b>309,963.0</b>	<b>352,893.1</b>	<b>396,903.0</b>	<b>406,574.5</b>	<b>435,443.1</b>
Food	38,020.2	38,582.5	38,214.0	38,948.2	40,292.1	42,809.3	44,956.6	48,297.9	50,387.4
Beverages	5,780.4	5,620.6	5,871.9	6,293.4	6,563.8	6,679.2	6,808.5	6,928.0	7,200.0
Tobacco products	1,817.9	1,883.3	1,963.3	2,046.5	2,006.5	2,471.5	2,505.0	2,783.6	2,837.8
Rubber products	2,675.8	2,557.9	2,542.4	2,665.4	3,086.9	3,412.1	3,887.7	3,921.9	4,175.7
Plastic products	6,289.3	5,996.8	5,648.8	5,766.3	6,192.8	7,102.2	8,243.1	8,804.4	9,355.1
Leather and allied products	1,289.6	1,162.3	940.6	888.7	930.5	1,006.3	958.9	909.0	974.9
Primary textile	3,146.8	2,779.6	2,693.5	2,689.7	2,733.3	3,072.7	3,401.0	3,654.6	4,021.3
Textile products	3,478.1	3,363.6	3,042.0	2,796.1	2,875.7	3,170.1	3,286.7	3,307.0	3,612.1
Clothing	6,948.1	6,831.3	6,156.2	5,853.7	5,933.3	6,146.9	6,497.9	6,325.2	6,746.9
Paper and allied products	25,847.5	24,026.3	21,003.4	20,832.2	21,232.6	25,647.8	36,393.1	31,018.4	30,562.7
Printing, publishing and allied industries	13,532.2	13,703.9	13,045.9	12,875.3	12,840.0	13,495.6	14,637.4	14,816.9	15,572.4
Refined petroleum and coal products	14,958.7	18,569.4	18,066.4	17,450.3	17,244.4	17,535.5	18,066.7	21,807.4	21,907.9
Chemical and chemical products	23,670.1	23,117.8	21,297.4	21,475.9	22,609.5	25,598.0	28,553.8	28,489.5	30,510.2
Wood	15,861.9	14,805.9	13,166.7	15,060.8	19,084.1	22,906.7	23,257.1	24,530.8	26,972.8
Furniture and fixtures	4,906.6	4,661.9	3,939.4	3,771.1	3,988.2	4,522.8	5,000.1	5,375.4	6,311.4
Primary metal	22,885.9	19,243.8	17,851.2	18,045.2	19,888.4	23,441.8	25,861.8	26,379.7	28,340.0
Fabricated metal products	19,161.4	17,876.9	15,928.0	14,960.9	15,404.1	17,814.5	20,226.6	21,015.9	22,885.0
Machinery	10,995.5	10,396.1	8,904.0	8,755.8	10,089.6	12,374.7	14,989.0	15,547.0	17,845.1
Transportation equipment	53,948.4	51,932.0	48,416.9	53,040.3	64,321.8	76,224.8	86,065.0	89,580.5	99,835.9
Electrical and electronic products	19,488.8	18,474.8	19,494.0	20,142.6	20,299.2	23,862.3	28,827.0	27,926.1	29,420.2
Non-metallic mineral products	7,959.4	7,391.2	6,251.6	5,980.2	6,226.7	6,698.4	7,137.3	7,496.9	8,000.0
Other manufacturing	6,324.0	6,217.2	6,066.2	5,954.7	6,119.7	6,899.8	7,342.7	7,658.6	7,968.4

Source: Statistics Canada, CANSIM, matrix 9550.

## 11.8 Value of Shipments of Goods of Canadian Manufacture

	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions								
<b>Canada</b>	<b>308,986.7</b>	<b>299,195.2</b>	<b>280,503.9</b>	<b>286,294.3</b>	<b>309,963.1</b>	<b>352,893.1</b>	<b>396,903.4</b>	<b>406,568.1</b>	<b>434,793.1</b>
Newfoundland	1,657.5	1,548.8	1,448.5	1,279.6	1,322.6	1,422.9	1,639.0	1,725.2	1,655.9
Prince Edward Island	417.0	396.4	430.4	501.4	510.8	540.0	704.2	747.5	877.0
Nova Scotia	5,203.7	5,139.2	5,294.9	5,165.7	5,266.6	5,407.3	5,959.9	6,131.8	6,231.8
New Brunswick	5,889.9	5,878.5	5,478.8	5,782.8	6,287.6	7,044.5	8,317.2	8,472.0	8,333.4
Quebec	75,525.8	74,228.3	70,188.6	69,436.7	74,798.7	85,185.6	94,419.5	96,603.8	101,406.8
Ontario	163,767.2	156,026.0	145,136.0	150,260.6	163,356.5	184,968.6	208,614.7	213,837.0	231,135.2
Manitoba	6,997.0	6,738.9	6,182.2	6,223.2	6,636.1	7,542.0	8,334.3	8,973.0	10,012.6
Saskatchewan	3,748.8	3,786.0	3,546.7	3,495.0	3,643.2	4,409.4	4,917.7	5,322.3	6,143.8
Alberta	19,117.2	20,048.4	19,474.4	19,242.3	20,951.6	25,259.8	28,886.9	30,771.9	34,287.6
British Columbia	26,596.3	25,329.2	23,259.3	24,839.0	27,142.6	31,048.2	35,040.3	33,933.4	34,672.3
Yukon Territory	..	..	..	..	12.5	14.0	15.9	16.5	17.7
Northwest Territories	..	..	..	..	34.3	50.9	53.7	33.7	18.9

Source: Statistics Canada, CANSIM, matrices 9550, 9570 and 9582.

## 11.9 Capital Expenditures on Construction

	1992	1993	1994	1995	1996
	\$ millions				
<b>Total capital expenditures on construction</b>	<b>76,414.6</b>	<b>75,541.2</b>	<b>81,444.2</b>	<b>76,391.3</b>	<b>80,288.2</b>
<b>Building construction</b>	<b>51,958.4</b>	<b>49,237.1</b>	<b>51,057.1</b>	<b>45,770.4</b>	<b>51,012.6</b>
Residential building construction	33,674.7	32,575.8	34,921.5	29,185.8	32,575.2
Single detached houses	11,181.1	10,801.8	11,591.6	8,836.9	10,874.9
Semi-detached houses	828.1	922.0	1,061.8	729.5	802.4
Apartments and row houses	4,946.8	4,339.5	4,362.1	3,574.4	3,141.9
Other residential buildings	16,718.7	16,512.5	17,906.0	16,045.1	17,755.9
Non-residential building construction	18,283.7	16,661.3	16,135.6	16,584.6	18,437.3
Industrial building construction	2,563.2	2,218.9	3,006.1	3,243.0	4,226.6
Plants (manufacturing, processing and assembling goods)	1,608.5	1,264.2	1,865.6	1,939.1	2,925.3
Other industrial building construction	954.7	954.7	1,140.4	1,303.9	1,301.2
Commercial building construction	9,331.1	8,479.3	6,250.8	6,264.5	6,944.8
Office buildings	5,419.0	4,445.6	2,598.1	2,507.4	2,764.1
Shopping centres, malls, stores	2,076.7	2,019.3	1,622.6	1,329.3	1,680.2
Indoor recreational buildings	468.6	485.2	620.2	1,024.4	1,046.8
Other commercial building construction	1,366.8	1,529.2	1,409.9	1,403.2	1,453.7
Institutional building construction	4,535.5	4,123.0	4,931.3	4,982.1	4,906.3
Schools, colleges, universities	2,417.2	2,390.1	2,261.2	2,328.7	2,633.2
Hospitals, health centres, clinics	1,038.5	905.8	1,283.6	1,265.2	1,143.5
Nursing homes, homes for the aged	375.8	244.5	276.4	445.5	390.5
Penitentiaries, detention centres	234.0	240.4	262.6	289.3	185.0
Other institutional and governmental construction	470.0	342.2	847.5	653.4	470.0
Other non-residential building construction	1,853.9	1,840.1	1,947.4	2,095.0	2,359.7
<b>Total engineering construction</b>	<b>24,456.2</b>	<b>26,304.1</b>	<b>30,387.1</b>	<b>30,620.9</b>	<b>29,275.6</b>
Marine engineering construction	414.5	242.8	492.1	445.0	447.0
Transportation engineering construction	5,113.0	5,340.2	6,032.2	6,435.8	5,874.1
Waterworks engineering construction	902.8	792.5	904.3	1,140.0	1,357.9
Sewage engineering construction	1,174.7	1,303.2	1,501.3	1,584.5	1,397.0
Electric power engineering construction	5,945.1	5,346.9	3,965.0	3,440.8	2,934.7
Communications engineering construction	1,560.8	1,587.1	1,446.3	1,298.3	1,879.5
Oil and gas engineering construction	7,290.7	9,503.2	13,720.5	13,474.0	12,890.9
Mining engineering construction	974.0	1,012.3	1,117.1	1,407.4	1,476.6
Other engineering construction	1,080.6	1,176.0	1,208.4	1,395.2	1,017.9

Source: Statistics Canada, CANSIM, matrix 3151.

## 11.10 Value of Building Permits, by Type

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions											
<b>Canada</b>	<b>24,690.0</b>	<b>30,980.9</b>	<b>34,829.2</b>	<b>39,318.4</b>	<b>32,130.5</b>	<b>28,468.0</b>	<b>26,995.1</b>	<b>25,586.3</b>	<b>27,636.7</b>	<b>24,594.7</b>	<b>26,155.5</b>	<b>31,217.5</b>
Residential	14,218.9	18,832.5	20,118.7	21,268.4	17,424.4	16,631.7	17,160.8	16,432.5	17,590.2	13,241.7	15,718.3	18,303.0
Non-residential	10,471.1	12,148.4	14,710.5	18,050.0	14,706.2	11,836.3	9,834.3	9,153.8	10,046.5	11,353.0	10,437.2	12,914.6
Industrial	1,899.4	2,806.1	3,046.3	5,492.2	3,392.7	2,119.8	1,643.3	1,755.6	2,250.2	2,822.8	2,642.9	3,452.7
Commercial	6,151.8	7,038.9	8,755.8	9,666.0	7,975.0	5,905.9	4,918.2	4,267.8	4,993.2	5,441.4	5,566.9	6,506.6
Institutional and government	2,419.8	2,303.4	2,908.4	2,891.8	3,338.4	3,810.6	3,272.8	3,130.4	2,803.1	3,088.9	2,227.4	2,955.3

Source: Statistics Canada, CANSIM, matrices 129 and 137.

## 11.11 Value of Building Permits

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions											
<b>Canada</b>	<b>24,690.0</b>	<b>30,980.9</b>	<b>34,829.2</b>	<b>39,318.4</b>	<b>32,130.5</b>	<b>28,468.0</b>	<b>26,995.1</b>	<b>25,586.3</b>	<b>27,636.7</b>	<b>24,594.7</b>	<b>26,155.5</b>	<b>31,234.0</b>
Residential	14,218.9	18,832.5	20,118.7	21,268.4	17,424.4	16,631.7	17,160.8	16,432.5	17,590.2	13,241.7	15,718.3	18,303.5
Non-residential	10,471.1	12,148.4	14,710.5	18,050.0	14,706.2	11,836.3	9,834.3	9,153.8	10,046.5	11,353.0	10,437.2	12,930.5
Newfoundland	207.5	235.5	272.9	346.8	312.6	275.0	242.5	255.4	262.7	201.7	224.1	218.6
Residential	119.8	124.5	162.1	198.9	203.8	160.0	160.6	166.9	174.9	131.1	164.1	142.2
Non-residential	87.7	110.9	110.8	148.0	108.9	115.0	81.8	88.5	87.8	70.5	60.1	76.4
Prince Edward Island	106.9	123.6	173.1	148.3	158.5	121.1	132.1	112.5	112.7	96.1	95.8	110.0
Residential	65.9	72.0	86.2	73.8	75.7	60.5	69.8	69.0	61.9	52.3	54.7	60.1
Non-residential	41.0	51.5	87.0	74.5	82.9	60.6	62.3	43.5	50.8	43.9	41.1	49.9
Nova Scotia	755.6	773.9	833.5	880.2	782.9	634.3	604.9	594.9	669.2	619.6	689.0	630.7
Residential	471.9	458.2	478.9	500.0	466.5	390.7	422.6	420.9	454.0	425.6	475.0	429.7
Non-residential	283.7	315.7	354.6	380.2	316.4	243.6	182.4	174.0	215.3	194.1	214.0	200.9
New Brunswick	461.1	516.7	502.2	593.5	493.3	413.9	453.7	427.4	440.5	487.9	441.1	459.0
Residential	229.3	235.8	256.3	273.0	267.7	219.7	255.5	259.7	249.5	209.2	236.4	241.8
Non-residential	231.8	280.9	245.8	320.5	225.6	194.2	198.2	167.7	191.0	278.7	204.7	217.2
Quebec	5,886.7	8,102.2	7,748.3	8,557.9	7,089.7	6,241.6	5,245.2	5,375.6	5,898.4	4,938.9	4,938.1	5,100.3
Residential	3,618.1	4,907.1	4,353.2	4,005.0	3,677.9	3,702.3	3,307.1	3,193.0	3,370.8	2,154.6	2,413.2	2,128.2
Non-residential	2,268.6	3,195.2	3,395.1	4,552.9	3,411.7	2,539.3	1,938.1	2,182.5	2,527.7	2,784.4	2,524.9	2,972.1
Ontario	11,359.5	14,833.7	17,280.8	19,558.9	14,024.9	11,997.8	9,962.9	8,774.7	10,001.3	9,192.1	9,597.6	13,194.1
Residential	6,648.9	9,377.6	10,564.5	10,873.2	7,414.5	7,018.9	6,362.0	5,528.4	6,434.5	4,946.2	5,939.3	7,911.1
Non-residential	4,710.6	5,456.1	6,716.2	8,685.7	6,610.4	4,978.9	3,601.0	3,246.3	3,566.8	4,245.9	3,658.2	5,283.0
Manitoba	809.8	862.7	789.2	836.9	731.5	561.1	541.2	528.6	685.3	525.4	592.3	689.6
Residential	520.6	515.7	475.1	394.2	344.0	251.6	307.1	306.1	318.5	254.8	281.6	326.4
Non-residential	289.2	347.0	314.1	442.7	387.5	309.6	234.2	222.5	366.8	270.7	310.7	363.2
Saskatchewan	741.5	666.1	524.4	502.7	453.9	327.5	323.1	326.8	372.3	478.2	548.0	626.8
Residential	359.0	302.3	242.5	144.6	123.5	90.8	155.2	154.7	158.5	161.0	223.1	236.7
Non-residential	382.5	363.8	281.9	358.0	330.4	236.7	167.8	172.1	213.7	317.2	319.8	390.1
Alberta	1,840.7	1,860.0	2,440.1	2,557.9	2,991.1	2,639.3	3,105.6	2,713.5	2,740.5	2,506.6	2,883.1	4,446.3
Residential	644.8	886.8	933.3	1,336.6	1,657.2	1,359.2	1,881.1	1,839.6	1,747.0	1,407.6	1,782.7	2,568.9
Non-residential	1,196.0	973.1	1,506.7	1,221.2	1,333.9	1,280.1	1,224.4	873.9	993.5	1,099.0	1,100.4	1,877.5
British Columbia	2,420.3	2,906.1	4,149.6	5,216.0	4,975.8	5,131.5	6,255.5	6,389.2	6,317.9	5,414.5	6,053.1	5,537.2
Residential	1,508.1	1,906.8	2,502.2	3,407.9	3,143.6	3,328.2	4,173.1	4,445.4	4,546.4	3,443.1	4,096.0	3,578.6
Non-residential	912.2	999.3	1,647.4	1,808.1	1,832.2	1,803.3	2,082.5	1,943.8	1,771.5	1,971.4	1,957.1	1,958.6
Yukon Territory	57.5	49.8	45.2	50.5	56.5	73.7	71.2	42.2	51.0	74.0	51.8	49.6
Residential	11.8	22.8	18.9	29.7	26.8	27.2	44.3	30.5	30.7	23.7	32.2	29.7
Non-residential	45.7	27.0	26.3	20.9	29.7	46.5	26.9	11.7	20.2	50.3	19.5	20.0
Northwest Territories	42.9	50.7	69.9	68.7	59.8	51.2	57.1	45.7	84.9	59.6	46.6	46.9
Residential	20.9	22.9	45.5	31.4	23.1	22.6	22.5	18.4	43.5	32.5	19.9	9.5
Non-residential	22.0	27.8	24.5	37.3	36.7	28.5	34.6	27.4	41.4	27.1	26.7	37.3

Source: Statistics Canada, CANSIM, matrices 129 and 137.



## 11.12 New Housing Price Index

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
1992 = 100										
<b>Canada</b>	<b>93.5</b>	<b>105.9</b>	<b>107.4</b>	<b>100.0</b>	<b>100.0</b>	<b>101.3</b>	<b>101.5</b>	<b>100.3</b>	<b>98.4</b>	<b>99.1</b>
<b>House only</b>	<b>101.0</b>	<b>109.2</b>	<b>108.7</b>	<b>100.6</b>	<b>100.0</b>	<b>100.8</b>	<b>100.9</b>	<b>99.9</b>	<b>97.7</b>	<b>99.0</b>
<b>Land only</b>	<b>77.3</b>	<b>97.5</b>	<b>103.4</b>	<b>98.1</b>	<b>100.0</b>	<b>103.2</b>	<b>103.7</b>	<b>102.6</b>	<b>101.4</b>	<b>101.4</b>
St. John's	84.7	89.3	92.5	99.2	100.0	100.1	100.4	100.6	99.5	97.4
Halifax	97.0	98.8	99.1	98.9	100.0	103.0	105.8	108.9	109.8	107.2
Saint John – Moncton – Fredericton	93.5	96.8	98.1	99.0	100.0	99.9	100.1	99.9	98.9	95.7
Québec	87.4	93.4	96.5	99.2	100.0	99.7	99.2	99.9	98.5	98.1
Montréal	93.5	96.7	99.3	99.9	100.0	100.8	101.4	102.1	102.0	101.9
Ottawa – Hull	91.4	96.5	100.3	99.9	100.0	99.4	99.7	97.9	96.4	97.0
Toronto	104.7	128.1	123.1	104.6	100.0	97.6	97.3	98.0	96.8	98.9
Hamilton	99.5	107.9	110.3	103.8	100.0	97.4	97.1	96.0	95.2	98.9
St. Catharines – Niagara Falls	91.6	99.3	106.2	102.5	100.0	96.8	93.0	92.3	93.2	96.8
London	85.6	93.9	99.3	99.8	100.0	99.9	100.2	97.5	96.5	97.4
Kitchener – Waterloo	99.4	109.7	111.8	103.1	100.0	100.8	98.2	97.5	97.3	98.1
Windsor	88.1	95.8	100.0	100.0	100.0	99.5	99.6	100.7	101.1	104.8
Sudbury – Thunder Bay	88.9	94.8	100.1	100.5	100.0	102.0	103.4	103.6	103.4	102.8
Winnipeg	98.8	98.4	100.2	100.1	100.0	103.6	107.1	108.7	109.7	111.3
Regina	90.3	91.7	93.3	95.6	100.0	105.5	109.7	113.1	115.0	119.1
Saskatoon	99.0	99.7	100.4	99.6	100.0	103.4	104.9	105.9	107.8	109.9
Calgary	84.8	90.9	102.2	99.4	100.0	103.1	105.5	106.4	107.4	114.5
Edmonton	77.2	83.6	96.9	99.1	100.0	103.5	104.5	103.1	102.3	104.1
Vancouver	81.0	93.7	99.0	91.9	100.0	107.7	107.1	101.5	95.4	92.3
Victoria	82.2	90.4	96.7	95.3	100.0	103.0	102.0	93.3	86.6	84.0

Source: Statistic Canada, CANSIM, matrix 9921.

## 11.13 Housing Starts

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Starts											
<b>Canada</b>	<b>245,986</b>	<b>222,562</b>	<b>215,382</b>	<b>181,630</b>	<b>156,197</b>	<b>168,271</b>	<b>155,443</b>	<b>154,057</b>	<b>110,933</b>	<b>124,713</b>	<b>147,040</b>
Newfoundland	2,682	3,168	3,536	3,245	2,836	2,271	2,405	2,243	1,712	2,034	1,696
Prince Edward Island	933	1,151	815	762	553	644	645	669	422	554	470
New Brunswick	6,460	5,478	5,359	5,560	5,173	4,673	4,282	4,748	4,168	4,059	3,813
Nova Scotia	3,716	3,621	3,681	2,683	2,872	3,310	3,693	3,203	2,300	2,722	2,702
Quebec	74,179	58,062	49,058	48,070	44,654	38,228	34,015	34,154	21,885	23,220	25,896
Ontario	105,213	99,924	93,337	62,649	52,794	55,772	45,140	46,645	35,818	43,062	54,072
Manitoba	8,174	5,455	4,084	3,297	1,950	2,310	2,425	3,197	1,963	2,318	2,612
Saskatchewan	4,895	3,856	1,906	1,417	998	1,869	1,880	2,098	1,702	2,438	2,757
Alberta	10,790	11,360	14,712	17,227	12,492	18,573	18,151	17,692	13,906	16,665	23,671
British Columbia	28,944	30,487	38,894	36,720	31,875	40,621	42,807	39,408	27,057	27,641	29,351

Source: Statistics Canada, CANSIM, matrix 999.

## 11.14 Housing Stock, 1996

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T./N.W.T
Dwelling units												
<b>Housing stock</b>	<b>11,227,280</b>	<b>196,103</b>	<b>47,909</b>	<b>349,613</b>	<b>269,918</b>	<b>2,967,121</b>	<b>4,095,712</b>	<b>427,546</b>	<b>392,744</b>	<b>996,472</b>	<b>1,454,635</b>	<b>29,507</b>
Owned	7,077,012	145,980	33,657	240,741	194,783	1,654,494	2,635,080	285,699	266,123	663,085	944,697	12,673
Rented	4,150,268	50,123	14,252	108,872	75,135	1,312,627	1,460,632	141,847	126,621	333,387	509,938	16,834
Occupied	10,759,953	185,375	46,389	333,398	260,996	2,825,566	3,944,056	413,721	367,432	950,251	1,404,799	27,970
Owned	6,846,365	141,842	33,105	233,488	191,584	1,594,548	2,548,284	280,676	256,560	642,790	911,134	12,354
Rented	3,913,588	43,533	13,284	99,910	69,412	1,231,018	1,395,772	133,045	110,872	307,461	493,665	15,616
Vacant	467,327	10,728	1,520	16,215	8,922	141,555	151,656	13,825	25,312	46,221	49,836	1,537
For sale	230,647	4,138	552	7,253	3,199	59,946	86,796	5,023	9,563	20,295	33,563	319
For rent	236,680	6,590	968	8,962	5,723	81,609	64,860	8,802	15,749	25,926	16,273	1,218
<b>Single detached dwelling</b>	<b>6,468,246</b>	<b>143,136</b>	<b>36,149</b>	<b>246,520</b>	<b>200,234</b>	<b>1,370,009</b>	<b>2,358,907</b>	<b>295,781</b>	<b>295,411</b>	<b>661,288</b>	<b>842,727</b>	<b>18,084</b>
Owned	5,752,073	128,391	32,293	220,059	181,737	1,234,518	2,130,247	264,700	252,640	578,451	717,575	11,462
Rented	716,173	14,745	3,856	26,461	18,497	135,491	228,660	31,081	42,771	82,837	125,152	6,622
Occupied	6,175,739	137,069	35,229	235,975	194,866	1,276,367	2,269,776	286,568	278,470	633,167	811,248	17,004
Owned	5,572,035	125,418	31,777	213,321	178,887	1,179,363	2,067,766	260,204	243,661	563,519	696,862	11,257
Rented	603,704	11,651	3,452	22,654	15,979	97,004	202,010	26,364	34,809	69,648	114,386	5,747
Vacant	292,507	6,067	920	10,545	5,368	93,642	89,131	9,213	16,941	28,121	31,479	1,080
For sale	180,038	2,973	516	6,738	2,850	55,155	62,481	4,496	8,979	14,932	20,713	205
For rent	112,469	3,094	404	3,807	2,518	38,487	26,650	4,717	7,962	13,189	10,766	875
<b>Multiple dwellings</b>	<b>4,759,034</b>	<b>52,967</b>	<b>11,760</b>	<b>103,093</b>	<b>69,684</b>	<b>1,597,112</b>	<b>1,736,805</b>	<b>131,765</b>	<b>97,333</b>	<b>335,184</b>	<b>611,908</b>	<b>11,423</b>
Owned	1,324,939	17,589	1,364	20,682	13,046	419,976	504,833	20,999	13,483	84,634	227,122	1,211
Rented	3,434,095	35,378	10,396	82,411	56,638	1,177,136	1,231,972	110,766	83,850	250,550	384,786	10,212
Occupied	4,584,214	48,306	11,160	97,423	66,130	1,549,199	1,674,280	127,153	88,962	317,084	593,551	10,966
Owned	1,274,330	16,424	1,328	20,167	12,697	415,185	480,518	20,472	12,899	79,271	214,272	1,097
Rented	3,309,884	31,882	9,832	77,256	53,433	1,134,014	1,193,762	106,681	76,063	237,813	379,279	9,869
Vacant	174,820	4,661	600	5,670	3,554	47,913	62,525	4,612	8,371	18,100	18,357	457
For sale	50,609	1,165	36	515	349	4,791	24,315	527	584	5,363	12,850	114
For rent	124,211	3,496	564	5,155	3,205	43,122	38,210	4,085	7,787	12,737	5,507	343

Source: Statistics Canada, CANSIM, matrices 4079 and 4090.





**C h a p t e r**

*Canada occupies a land mass larger than all but one of the countries of the world. Little wonder then that much of our ingenuity has been spent mastering time and space.*

**T w e l v e**

*Even in the country's founding document—the Constitution of 1867—Canada's Fathers of Confederation were readying for the challenge of distance. They provided for a railway that would connect the country and, in 1871, persuaded British Columbia to*



## Canada's High Road

*In 1912, an Englishman named Thomas Wilby drove from Halifax to Victoria. Nothing unusual in that, except for one small detail: it was before the construction of the Trans-Canada Highway, the 7,821-kilometre national road that now connects St. John's to Victoria.*

*In the absence of this convenience, it took Wilby almost two months to cross the country. At various times, he had to "portage" the car on trains and boats, trundle across trackless prairie, and negotiate his way up steep hills.*

*Coincidentally, 1912 was also the year that the residents of Alberni on Vancouver Island proudly erected a sign announcing they were to be the last stop on the "Canadian Highway." In fact, the Trans-Canada Highway was not completed until 1962.*

*Since it opened, the Trans-Canada has drawn travellers, athletes and adventurers of all sorts. Although Terry Fox was forced to abandon his famous Marathon of Hope along the Trans-Canada, Rick Hansen did make it from coast to coast, in 1987, by wheelchair.*

join the new federation with the promise of a trans-continental railway.

The sheer expanse of Canada has also been overcome with miraculous inventions of communication. In 1876, just less than a decade after Confederation, Alexander Graham Bell masterminded a gadget that has transformed the planet: the telephone. Today the telephone has been transformed into an information highway. At the tap of a computer key, someone in Rankin Inlet in the Arctic can go shopping in Victoria, British Columbia, or visit on-line with people the planet over.

In addition to this "at a tap" technology, Canada has a highly developed matrix of transport from coast to coast, which has cut our sense of distance and even changed our perception of time. In tandem, a retail trade sector has grown and evolved since even before Eaton's first opened on Toronto's Yonge Street in 1869. The communications, transport and retail sectors have not only shaped our country but also the way we live in it.

## COMMUNICATIONS

Technology pundits joke that someday, your toaster will be able to download last night's stock quote and burn it into your morning bagel. If that seems far-fetched, consider the possibility that your house might one day "talk" to a weather database, and then adjust the room temperature to your personal comfort level.

Houses like this are already being built. An American software mogul has built a house in which guests wear an electronic pin. Not only does the house know where each guest is, but it can also turn lights on and off as the guests move around, and have their favourite music or newscasts follow them from room to room. If you're visiting this house and you get a call, the only telephone that will ring is the one nearest you.

If communications systems can work like this in the 1990s, what will they be like 20 years from now? Some experts predict that in 15 years, computer chips will be about 15,000 times more potent than those in

today's personal computers. What takes our best personal computer two years to do now, working 24 hours a day, tomorrow's computer will be able to do in an hour.

Perhaps the toaster pundits are more insightful than we think.

## Convergence

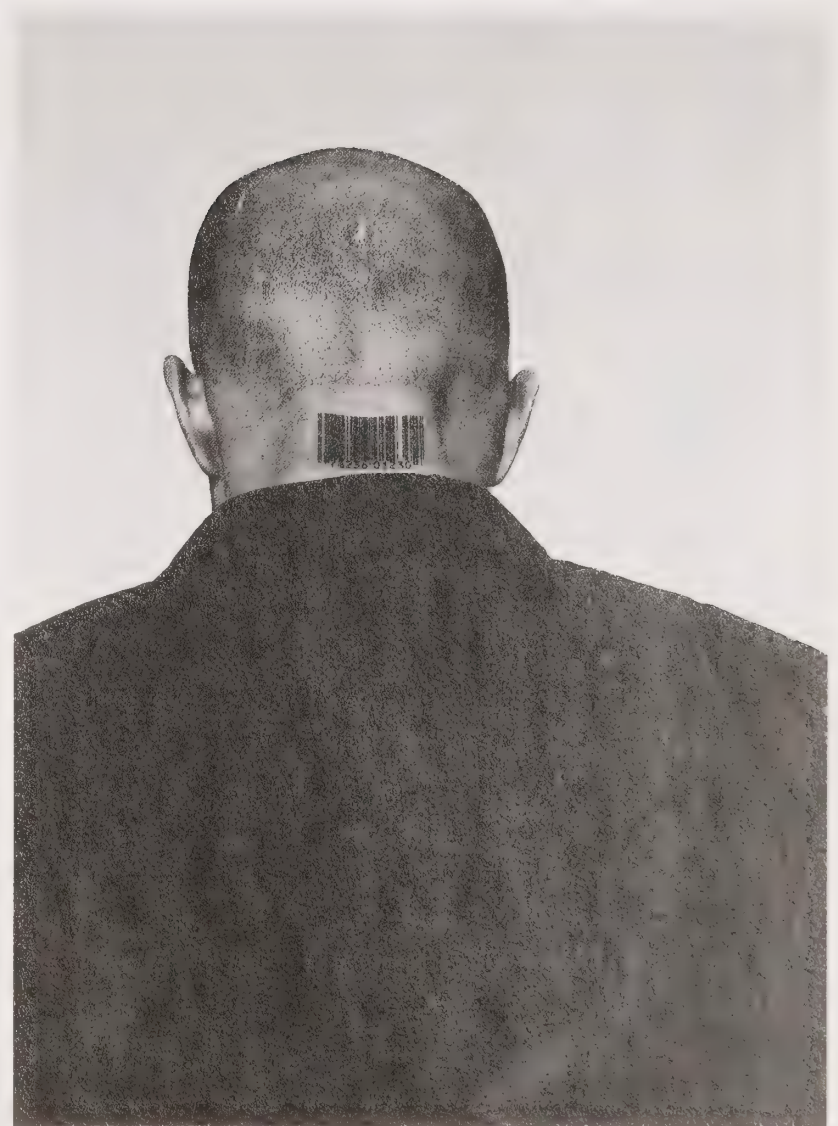
Understanding this revolution in information technology depends on understanding two words: convergence and digitization.

Convergence is really about the union of technologies—and companies—that were once separate. Canadian homes usually have three sets of wires and cables connecting them to the outside world. One carries electricity, one carries conversations or computer data and one carries your favourite television programs. When technologies converge, only two sets of wires may be required to carry all this, and more, into the home.

Digitization, on the other hand, is about turning communications such as voice, video and faxes into data so they can be read by computers. Computers can recognize only two values: either 0 and 1, or off and on. To encode something digitally, therefore, is to put it into a series of zeroes and ones. Once something is digitized, it is easy to store and to manipulate electronically. A CD player reads music that has been digitized, and then translates that music into sound.

Digitization, computerization and increasingly powerful computers mean that just about any device can have its own brain. This even extends to the kitchen stove, which can “memorize” favoured recipes or ways of preparing special dishes.

For a country as large as Canada, advancing technologies will greatly diminish the geographic distance that separates us. Already, someone in Montréal, for example, can use the Internet to talk to anyone in the world for about half a cent a minute. This ease of communication is bound to have a revolutionary impact on the marketplace and the workplace.

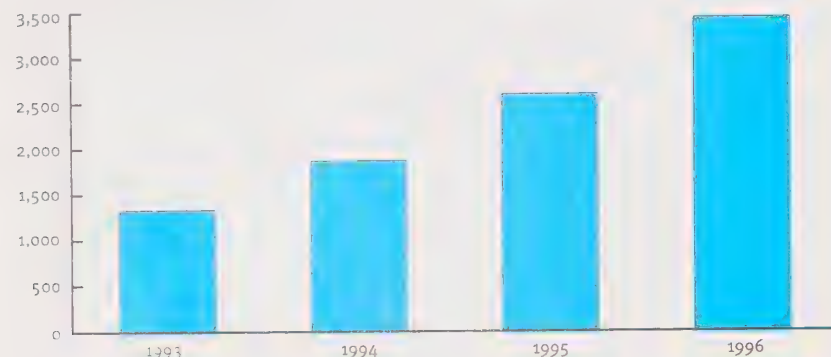


*Work by Jana Sterbak, Galerie René Bouin*

**Generic Man**

**Cellular phones growing in popularity**

Number of cellular phone subscribers  
(in thousands)



Source: Statistics Canada, CANSIM matrix 2400.

Friends and business partners can just as easily be in Morocco or Hong Kong as across the street. In fact, experts say, the “end of distance” will affect where companies choose to locate, what kind of work their employees do, whether or not they succeed, how governments raise money, how cities develop and much more.

No wonder, then, that Canadians are so plugged into the Internet. In 1997, more than one-third of Canadian households—4.2 million in all—had a computer, more than triple the proportion in 1986. Likewise, in 1997, one in three home computers was used to access the Internet. That means that, as of 1997, about 13% of households were “on the Net,” almost double the proportion in 1996.

Canadians are also quite mad about the telephone. In 1987, some 98% of Canadian households had at least one phone, and 22% had three.

Today, 98% of Canadian households have at least one phone, while 37% have three, and 19% have a kind of telephone available here just since 1985: the cellular.

These numbers put Canada in a class by itself. Of the six largest countries in the world, we have by far the most telephones per person. There is a telephone in Canada for every 1.6 people. In comparison, in the United States, there is a telephone for every 1.9 people and in Australia, for every 2.1 people. The numbers of people sharing a telephone are even higher in Russia (6.1 people per phone), Brazil (16.3) and China (60.2).

Not surprisingly, this also puts Canada at the forefront of telephone technology. For example, there are more than 500 high-tech companies in the Ottawa Valley alone (dubbed Silicon Valley North) which specialize in everything from biotechnology to telecommunications. New Brunswick was the first jurisdiction in North America to have a fully digitized telephone network, in which a voice on the telephone is broken down into computer language and reassembled into sound at the other end. This network includes voice mail, call return and other features.

In 1997, Bell Canada started a trial of a new service in homes in London, Ontario and in Repentigny, Quebec. Billed as “the marriage of telephony, cable and computer,” this service uses the most modern kind of cable network to deliver video and high-speed Internet-based services over phone lines to televisions. Subscribers can also choose from a menu of movies and FM radio stations.

Convergence is here.

### **More on the Telephone**

The use of telephones has spread quickly in Canada. In 1886, there were 13,000 Canadian telephones; in 1941, no fewer than 1.5 million. In 1995, there were about 12 million residential telephone lines and another 6 mil-



lion business lines. In 1941, there were 3,200 telephone systems in Canada, compared with 59 today. As the number of telephones has increased, the number of systems has dropped, with large systems absorbing the smaller ones.

We are also talking about large sums of money. In 1996, the local phone companies' net profits after income tax rose nearly 28% from the year before, to \$1.4 billion. The sources of the revenue are changing, however. In 1992, local telephone companies counted on long-distance calls for half their income; by 1996, only a third of their revenue came from this source. In contrast, revenues from local services, which were a third of total revenues in the early 1990s, now account for almost half of total revenues.

The cellular phone industry has been another rapid growth area. At the end of 1996, some 3.4 million Canadians were "on the cell," up 32% from the year before, and a huge increase from the 98,300 cell-phone subscribers in 1987. Between 1995 and 1996, cell-phone companies' net after-tax profits jumped 45% to \$127 million.

One of the attractions of cell phones is convenience, but there are limitations. Given that cellular technology is actually radio technology, the cell phone must send a radio signal to the nearest cell site, which then transfers the signal to a central switch that looks for an available channel. The cell-phone industry has to make do with 412 radio frequencies, so if two cell-phone users are in close proximity, the signals can cross and create interference on the phone lines. Many of these problems are being solved or at least minimized by the latest technical development, Personal Communications Service (PCS), which uses digital technology to increase capacity. One can also receive e-mail or faxes by plugging a PCS phone into a computer.

## Television

If you live in Canada, you can kick off your shoes, hit the sofa and—if you subscribe to cable TV—surf dozens of channels. You can also pick up local stations for free off the airwaves. In 1996, there were 95 such television stations coast to coast.



Illustration by Patrick Corrigan



Canada's television broadcasters are generally profiting from this plethora of program offerings. In 1996, private television stations made \$30 million after income taxes. The cable industry—which delivers network TV signals as well as specialty channels for a fee—was even more profitable. In 1996, its net profits after income taxes were \$148 million. Canadians paid \$2 billion for basic cable in 1996, plus another \$775 million for optional services, including specialty channels.

Our viewing choices continue to expand. In the fall of 1997, we could watch new French-language channels devoted to music, lifestyles, animation, and headline news, or tune in to new English-language channels that specialize in comedy, history and animation, among other subjects.

In 1997, the Canadian Radio-television and Telecommunications Commission (CRTC) licensed five broadcasters to provide video-on-demand (VOD) services, which will eventually allow TV viewers to browse a computerized library of video programs, mostly movies. The digital technology will in turn help businesses to develop and deliver other Canadian digital services, including the specialty services.

Video-on-demand provides another revenue stream for Canadian-produced feature films and other programming. The CRTC requires that one Canadian feature be shown for every 20 non-Canadian features. Moreover, most VOD services must put at least 5% of their gross annual revenues toward an existing production fund for Canadian programming.

Video-on-demand is the first step toward digital television. Another way of providing digital television is through direct-to-home (DTH) satellites, which beam digitally compressed signals to small, fixed, pizza-sized satellite dishes installed on or near the viewer's home. DTH can provide CD-like sound and high-clarity pictures, although many of the satellite services that now exist generally deliver signals in less pristine formats.

Getting a Canadian DTH service off the ground has proved difficult. Two DTH rivals merged in 1997 and went on the air shortly thereafter with

75 channels. Another DTH company finally debuted in 1997, (two years later than planned) offering some five dozen digital video channels and more than 30 CD-quality music channels.

The technology isn't all that is changing. Business structures are evolving as well. For example, Baton Broadcasting has now gained control over the Canadian Television Network (CTV). The Canadian Broadcasting Corporation (CBC), meanwhile, has coped with budget cuts. In 1996–97, it faced an estimated drop of some \$110 million in federal funding from the year before for its TV and radio operations.

## Radio

While private television stations are generally in the black, radio is faring less well. In 1996, private radio broadcasters—consisting of 290 AM stations and 196 FM stations—lost, as a whole, \$3 million, which is actually an improvement over the previous few years. In 1994, for example, private radio stations lost \$31 million, and the year before, \$48 million. This loss was especially pronounced among AM stations, which lost more money than the FM stations made, in large part due to inferior sound.

To compensate, AM stations are increasingly turning to formats that don't require high-quality sound, such as news and talk shows. They are also letting people go. Wages and salaries are an especially heavy part of a radio station's budget, so more stations are replacing on-air staff with alternative programming.

What may help the radio industry is the coming digital revolution. With digital radio, the sound quality is far better than that of conventional analog radios, much as CDs sound better than vinyl records. Unlike AM and FM, digital radio reception is mostly immune to interference and so has almost no static or echoes.

Radio broadcasters are also taking part in the coming communications revolution in another way: buying interests in other media.

When the CRTC licensed 23 new specialty and pay TV undertakings in 1996, some 16 were owned in whole or in part by radio stations and conventional TV networks. This cross-ownership is, in fact, another example of convergence. A cable company has a stake in several of the new channels, while a newspaper is a partner in another group of channels.

## Mail

In 1705, the government of New France paid a Portuguese immigrant, Pierre Dasylyva, 20 “sous” a letter to run mail between Montréal and Québec.

By the 1860s, Canada’s postal system had so grown that it was handling some 41 million pieces of mail a year. Today, Canada Post handles this kind of volume every day. In 1996, some 11.8 billion pieces of mail moved through Canada’s postal system.

To deliver all this mail, Canada Post uses a sophisticated network of 22 plants with advanced processing technology and a full contingent of about 63,000 employees. In 1995–96, Canada Post generated revenues of more than \$4.9 billion.

The post office also sends out millions of kilograms of mail every year to other lands and in return receives a fair share. One of the more popular mailing addresses in Canada is the North Pole. Every year, Santa Claus gets more than a million letters from Canada and around the world. Diligently, Canada Post assigns 13,400 employees to read and reply to Santa’s mail.

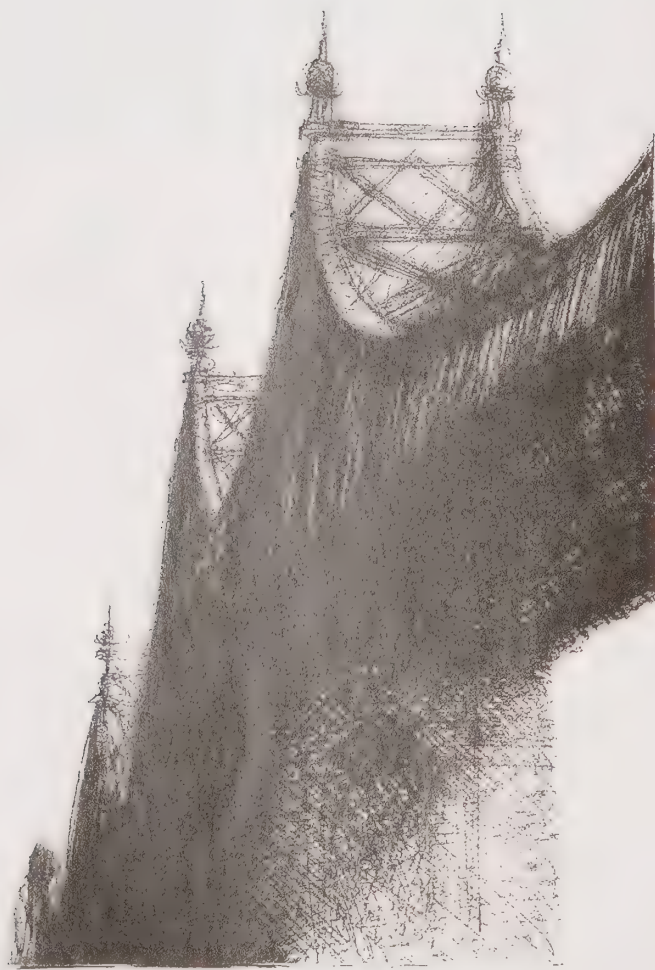
## TRANSPORT

Since the end of the Second World War, the number of cars on Canada’s roads has increased twelvefold, and the amount of traffic has increased tenfold. In 1995, a record 11.9 million passengers flew between Canada and the United States on scheduled and chartered flights. That same year, the



*Photo by Edith S. Watson (further details, see Appendix C)*

**The mail carrier at Point au Baril on Georgian Bay, around 1916.**



Work by Hugh Mackenzie (further details, see Appendix C)

### **Bridge II (2<sup>nd</sup> state)**

rails moved 4 million people and freight weighing 273 million tonnes along operating track that stretched 80,000 kilometres. Even pipelines are an important part of Canada's transportation system, channelling some 207 million cubic metres of crude oil in 1995. Clearly, the rigors of making it from one end of this vast country to the other have collectively created a complex and sophisticated matrix of transport.

## **Cars and Mass Transit**

In Canada, roads are used for about 90% of all intercity passenger trips and carry roughly 75% of the total value of Canadian freight shipments. Several factors, including more expensive cars and an aging population, are expected to slow down future increases in road traffic.

Between 1961 and 1993, the average age of Canada's highways increased from nine to 14 years, while the average age of Canada's bridges went up from 11 to 23 years. In the 1980s and 1990s, spending on highways did little more than make up for the deterioration of what already existed. To address this, in 1994, the federal government launched the Canada Infrastructure Works program, which involves three levels of government, and an investment of \$6 billion on Canada's roads, sewers, and other types of municipal infrastructures over a five-year period.

Mass transit is losing ridership. In 1996, the average Canadian hopped the bus, streetcar or subway about 46 times. This was the lowest ridership level since 1970, when we averaged about 43 such trips. Before the 1950s boom in suburban living, Canadians used mass transit much more. In 1950, for example, the average Canadian took more than 100 mass transit trips.



## Airlines

In 1995, Canada and the United States signed the Open Skies agreement on transborder air services. This agreement gave both Canadian and American air carriers improved access to all transborder markets. Since 1995, at least 97 new services have been added, 48 of which are Canadian. Canadian passengers now enjoy better air links to many American cities, including Atlanta, Denver, Minneapolis and Orlando.

There is increasing competition among Canada's two major carriers—Air Canada and Canadian Airlines International (CAI)—and the large charter carriers. The charters increased their share of the domestic passenger market almost every year from 1988 (when airlines were deregulated) to 1995. In 1995, the charters took 11% of the market.

Charter airlines and the regularly scheduled carriers are almost morphing into one another. Before the Open Skies agreement, some routes were operated only by charters, so Air Canada and CAI offered their own charter services to remain competitive. The flip side is that charters are starting scheduled routes to compete head-to-head with the major carriers, thanks to new rules under the agreement.

Canadians are also flying more, even though domestic aviation has been dampened somewhat by service cutbacks by the major airlines, especially in the small, less profitable markets. In 1995, a total of 99 air carriers flew in Canada, transporting some 36 million passengers a total of 73.5 billion kilometres.

In 1996, both of Canada's major carriers joined global airline alliances. Air Canada went into business with United, Lufthansa and Scandinavian Airlines, while CAI formed an alliance with British Airways and American Airlines. As a result, there has been increased service to such destinations as London and Frankfurt.

## Bridge to 2097

*In 1873, the Canadian government promised its newest province, Prince Edward Island, that a “continuous means of communication between P.E.I. and the mainland would be maintained.”*

*Until recently, a system of ferries honoured that promise. But in 1997, Canada opened an engineering marvel: a 13-kilometre bridge that connects this island province to the mainland.*

*Confederation Bridge, as it is tellingly named, stands 60 metres high and is expected to last at least 100 years, possibly longer with proper maintenance. With an average height of 40 metres above the water, it can allow cruise ships to pass beneath. An 11-metre wide road has two travelling lanes and two emergency shoulders and roughly 2,000 cars can cross the bridge every hour.*

*One peculiar feature is its road curves, which are intended to keep drivers more attentive by eliminating the hypnotic effect of a straight bridge. After all, the bridge does stretch 13 kilometres!*



At the same time, ticket prices have fallen. A flight from one small Canadian city to another would probably have cost about 30% less in the first six months of 1996 than in 1995.

This drop in ticket prices has coincided with the introduction of new domestic scheduled services by companies specializing in discount airfares. In 1996, low-cost air carriers took advantage of lower operating and overhead costs to offer discount fares. In 1995, a record 71% of passengers on domestic flights took advantage of discounts, and a record 80% found discounts on international flights. In 1997, however, two of the discounters, Greyhound Air and Vistajet, went under, and fares soon began rising for tickets on Air Canada and CAI.

In 1995, both Air Canada and CAI reported record levels of operation and revenue. Air Canada reported an income of \$27 million, an increase from \$3 million the year before. CAI, however, had a basic loss of \$113 million, after breaking even in 1994.

## Rail, Shipping and Trucking

Whether Canadians are moving themselves or their products, they count on a vast network of railways, shipping lanes and roads, most of which are connected to one another. The passenger side of this network is important to tourism, while the freight side is crucial for our trading relationships.

In 1996, Canada's rail industry, including both freight and passenger, generated \$7.2 billion in revenue (the same amount as the year before), but operating expenses fell, resulting in a profit of \$165 million, compared with a loss of \$1.5 billion in 1995.

In Canada, VIA Rail is synonymous with passenger rail service. Despite a cut in 1996 of \$50 million in government subsidies, people rode the rails 3.7 million times with VIA, and VIA made \$184.5 million.

The federal government has always been closely involved in Canadian rail, but in the 1990s, this role has diminished as the government



In 1997, Canada Post issued a stamp celebrating the opening of Confederation Bridge.

cut its subsidies. Since 1990, these subsidies have dropped by more than a quarter. In 1995, it privatized CN Railways. In 1996, the Canada Transportation Act replaced earlier legislation covering rail transportation in Canada. Under the Act, the Canadian Transportation Agency plays a smaller role in regulation, helps rail companies make better use of the rail network and promotes the growth of short-line railways.

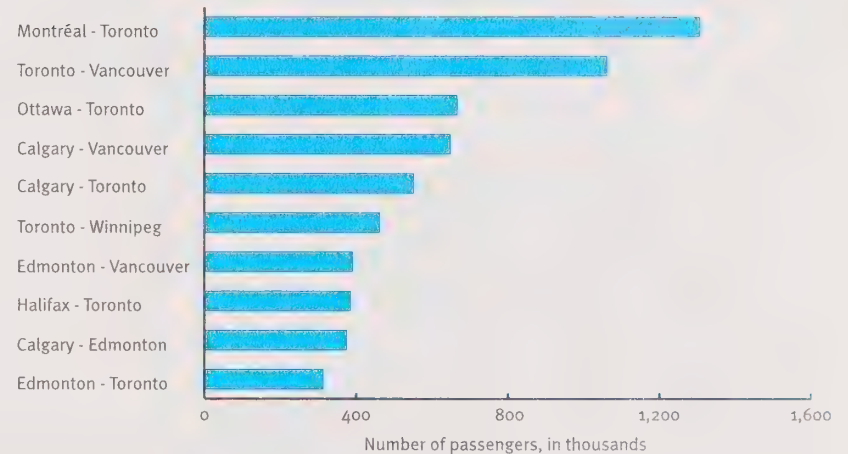
Transport Canada has projected that by 2002, freight traffic will increase in all categories, but especially in trucking. Despite this increase, competition among the different modes has become intense. Deregulation and globalization have forced the rail, marine and trucking industries to find new ways to both compete and co-operate with one another.

Rail and trucking firms, for example, are now working together to reduce shipping costs. One of their new working tools is the so-called roadrailer. This hybrid trailer, with its rubber tires and retractable railway undercarriages, can move on both railways and highways.

Co-operation with competition seems to define the action in these two sectors as they have both gone after markets newly available through free-trade agreements with the United States and Mexico. To compete in the American market, for instance, CN Railways has built a new rail tunnel under the St. Clair River, which connects Michigan and Ontario, with tracks that can accommodate double-stacking cars. CP has also enlarged its Windsor–Detroit tunnel so that it too can accommodate these taller containers, which double a train's capacity without adding much to its operational costs.

Short-line railways have helped the rail industry catch up to its trucking competitors, even though the trucking industry is still ahead of the game. In 1995, the large "for-hire" trucking carriers earned revenues of nearly \$12.1 billion. Intercity carriers hauled 167 million tonnes of freight. Domestic shipments were up 5% from the previous year and transborder

**The 10 most popular domestic routes to fly, 1996**



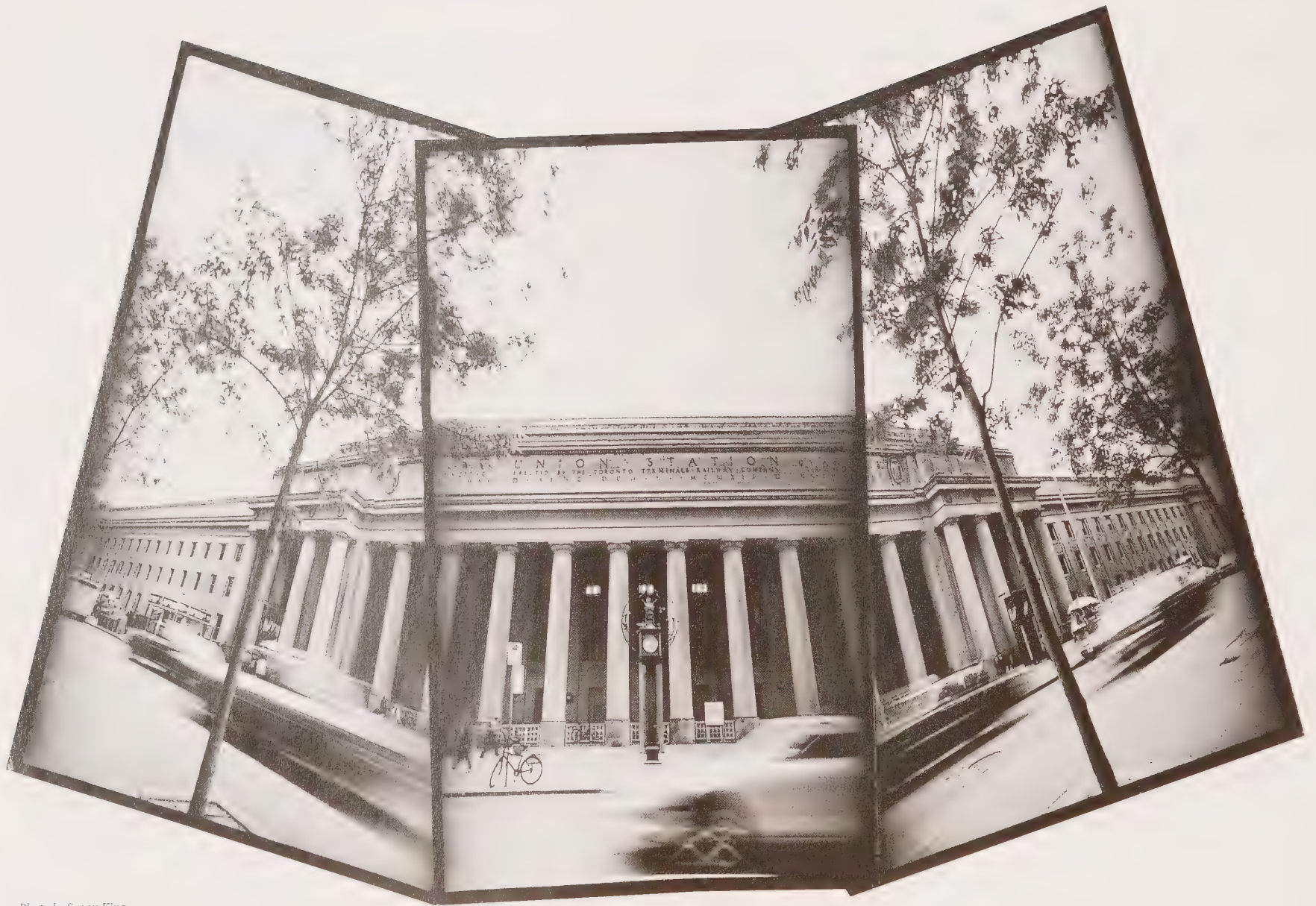
Source: Statistics Canada, Catalogue no. 51-204-XPB.

freight was up 8%.

In fact, while domestic activity has increased over the past five years, transborder activity has increased ever more as a higher percentage of companies take freight across the border. In 1995, more than half of our exports to the United States (by dollar value) crossed the border on trucks.

In addition to railways and trucks, Canadian freight is also carried on ships. In 1995, Canadian ports handled record levels of international cargo. These record levels were driven by growing trade in natural resources, such as coal shipments from Vancouver and crude petroleum transshipments through Port Hawkesbury, Nova Scotia. Total international tonnage reached 260.1 million tonnes in 1996, up 0.1% from 1995, and a record high.





*Photo by Susan King*

**Union Station, Toronto.**

## *B i r c h   B o w*

*Grey Owl, an early 20th-century Canadian conservationist and writer who longed to be a North American Indian (but was really the British-born Archibald Belaney), once quoted happiness as “a good canoe, a pair of Jibway snowshoes, my beaver, my family and ten thousand square miles of wilderness.” Through his writing and lecturing in Canada, the United States and the United Kingdom in the 1930s, Grey Owl was instrumental in promoting the canoe as an important feature of the Canadian landscape.*

*In fact, historian William Wood has*

*pointed out that the canoe was to the Aboriginal peoples what the camel is to desert tribes and what the ship once was to colonizing Britain.*

*In Canada, the canoe seems to have been invented as an efficient way to carry fishermen out to sea or braves to war. Europeans thought it an essential conveyance and the only practical mode of transport through the trackless wilderness of Canada. In fact, explorers like Jacques Cartier and those who followed were eager to exchange their cumbersome rowboats (with which they came ashore) for these*

*light, manoeuvrable watercraft. From the 1600s on, the only way to the core of Canada for explorers, surveyors, map-makers, prospectors, Old World missionaries and travellers alike was in a bark canoe.*

*There was another side to the canoe, though it had nothing to do with its efficacy. Scottish novelist Robert Michael Ballantyne, who worked for the Hudson's Bay Company in the 1840s, wrote of its more magical side:*

*“I have seen four canoes sweep round a promontory suddenly and burst upon my view, while at the same moment the wild romantic song of the voyageurs, as they*



*plied their brisk paddles, struck upon my ear; and I have felt thrilling enthusiasm on witnessing 30 or 40 of these picturesque canoes . . . half shrouded in the spray that flew from the bright vermilion paddles. Alas! The forests no longer echo to such sounds . . . ”*

*Today, there still is the echo of the canoe, although it has evolved from its birchbark beginnings through to wooden, canvas-*

*covered, aluminum, fibreglass, nylon and foam, plastic and polyethylene models with hundreds of variations in the design of keel, bow and body shape. Only a very few intrepids yet use the canoe as a means of livelihood—hunters and trappers, for example. Mostly, canoes are for fun, with some 2.3 million people paddling an estimated 1.2 million canoes and kayaks on Canada’s waterways every year.*

*For a former prime minister, the canoe was the path to self-knowledge. As a young man, Pierre Elliott Trudeau wrote, “Travel a thousand miles by train and you are a brute; pedal five hundred on a bicycle and you remain basically a bourgeois; paddle a hundred in a canoe and you are a child of nature.”*

## Pipelines

In 1995, Canadian pipelines channelled 207 million cubic metres of crude oil, compared with 201 million in 1994. Alberta provided the majority of this: 69% in all, followed by Ontario with 13% and Saskatchewan with 9%. Canada's pipelines exported 68 million cubic metres of crude in 1995, an 8% increase from the year before. Canadian crude continues to find a strong market in the United States, where domestic production has been dropping.

Within Canada, most oil flows from west to east. Whereas Quebec relies on imports of crude oil for its needs, Ontario uses all the oil sent from the Northwest Territories, about 12% of the oil sent from Alberta and about 20% of the oil sent from Saskatchewan.

In 1995, operating revenues for the pipeline industry reached \$1.2 billion, an 8% increase from the year before, and the industry employed 1,845 people, compared with 1,691 the year before.

## RETAIL AND WHOLESALE TRADE

Canadian retailing has its own icons and traditions. The Hudson's Bay Company, better known as The Bay, was chartered in 1670, when its "Company of Adventurers" staked a claim to the Canadian fur trade. Two hundred years later, and just two years after Confederation, another icon of Canadian retailing opened in Toronto.

Timothy Eaton revolutionized retail by offering customers fixed prices and by guaranteeing satisfaction or money refunded. Eaton's became one of the largest department stores in North America and through its catalogue, first printed in 1884, offered a mail-order service to Canada's pioneers.

There are also the wholesalers. Just as one buys goods from retailers, many retailers buy those same goods from wholesalers. These wholesalers



*The Glenbow Archives, Calgary*

Between 1910 and 1930, developing Western Canada was a national priority.

## *The Cariboo Camels*

*In the spring of 1862, a group of British Columbia residents imported 23 two-humped, two-toed camels from Manchurian China to save the day for Canada's Cariboo gold rush.*

*The importers (who paid \$6,000 for the camels), were sure the animals would become the freight trains of the gold rush, carrying supplies through the tortuous Fraser Canyon. After all, these sure-footed beasts could carry half-ton loads and move along at twice the speed of mules. They wouldn't require much food and would survive for days without water. The scheme appeared quite brilliant, really.*

*At first, the camels performed well. Hobbling along the footpath, they soon adapted to the climate and ate well: everything from soap to trousers. The plan began to unravel, however, when their toe pads became torn, as they were not used to Canada's rocky terrain. Undeterred, the camel drivers outfitted them with canvas and rawhide "boots." A bigger problem soon became apparent, though, and it was olfactory in nature. Mules simply stopped dead when they*

also sell to industrial, commercial, institutional and professional users, as well as to farmers, exporters and households.

## **Retail**

Even icons can get into trouble. In early 1997, the Eaton family's firm was forced to seek bankruptcy protection. In early 1998, after a year of restructuring, Eaton's announced that the 1997 Christmas shopping season had been its most successful in eight years.

Canadian retail sales found themselves generally in a slump in the mid-1990s, quite possibly a reflection of a similar stall in the disposable incomes of most Canadians. Today, though, there's been an upsurge in retail sales (an increase of 7.4% in 1997), perhaps because low interest rates have both discouraged savings and encouraged purchases, particularly of the big-ticket items, such as furniture, cars and recreational vehicles.

Consequently, department store sales overall are increasing. In May 1997, for example, department stores rang up sales 11% higher than a year before, and in August 1997, sales were 8% higher than they had been a year earlier.

Meanwhile, retail success already surrounds The Bay's purchase of K Mart Canada which it will merge with its other discount chain, Zellers, to challenge the so-called Wal Mart "invasion."

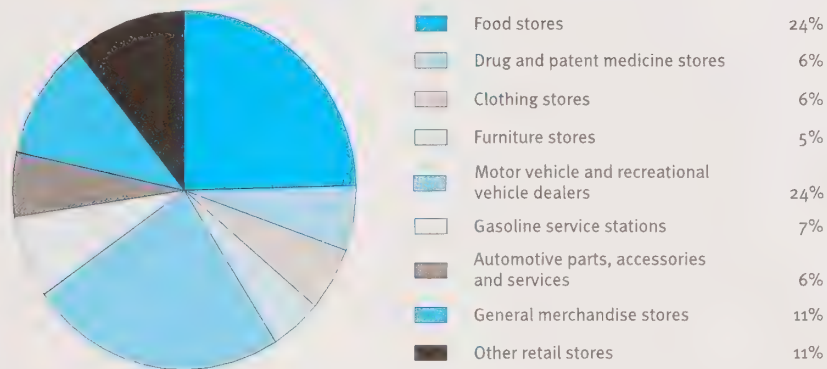
The Wal Mart phenomenon has in fact heralded a rise in new-format retailers, which can occupy buildings the size of airplane hangars. One format, the superstore, carries a very wide selection of groceries, often in bulk packages, and also offers photofinishing, pharmaceutical products and video rentals. Another format, the "category killer," carries a wide selection of a specific type of merchandise. One example: in 1995, two major Canadian bookstore chains merged to form Chapters Inc., a chain of 335 stores. Since then, the company has opened some 20 superstores

across Canada. These stores, with their coffee bars and extended hours, now account for a quarter of the company's business.

But the expansion of the new-format retailers, mainly American retail companies, is slowing as traditional Canadian retailers fight back. Some chains have either reinvested in existing facilities or have developed new competing formats. Others have used new technology to improve inventory control or to better such services as home delivery.

Local stores are also learning to play to their strengths by expanding selections. It may be easier for many people to buy food from the closest pharmacy than to visit a large-retail format in a large shopping centre.

Where Canadians spent their retail dollars in 1996



Source: Statistics Canada, CANSIM matrix 2400.

*picked up the scent of the camels. Apparently, the smell was so intolerable that even the horses panicked. This in turn panicked the camels, and one calf was lost to the canyon, slipping over the edge with a load of Scotch whisky.*

*Amidst havoc and threats, the camel owners were obliged to remove the animals from the trail. Various, they were sold or let loose. Only one endured beyond all expectations, taking up residence with one of the camel merchants, whom the camel outlived by 26 years.*



Nevertheless, Canadians continue to buy more from direct sellers, such as telephone and door-to-door salespeople, or from catalogues. For example, from 1983 to 1994, sales in this field rose every year but one. The non-store retailing sector, which includes catalogues, infomercials and the Internet, is expected to keep growing. In 1994, New Brunswick shoppers were even able to shop through special screens on their telephones.

### **The Wholesalers**

Since 1996, wholesalers have generally been reporting higher sales. Since mid-1995, sales of farm equipment have been rising, due partly to low interest rates and partly to a \$1.5-billion federal payment to farmers in 1996. Computer sales, on the other hand, have slowed somewhat, but there has been a boom in the lumber and building materials sectors, given stronger housing markets in Canada and the United States.

## SOURCES

Canadian Broadcasting Corporation  
Canadian Cable Television Association  
Canadian Radio-television and Telecommunications Commission  
Retail Council of Canada  
Statistics Canada  
Transport Canada  
Treasury Board of Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Surface and Marine Transport.** Irregular. 50-002-XPB
- **Aviation: Service Bulletin.** Monthly. 51-004-XPB
- **Air Carrier Traffic at Canadian Airports.** Annual. 51-203-XPB
- **Air Passenger Origin and Destination.** Annual. 51-205-XPB
- **Canadian Civil Aviation.** Annual. 51-206-XPB
- **Air Charter Statistics.** Annual. 51-207-XPB
- **Rail in Canada.** Annual. 52-216-XPB
- **Oil Pipeline Transport.** Monthly. 55-001-XPB
- **Communications.** Quarterly (irregular). 56-001-XPB
- **Telephone Statistics.** Annual. 56-203-XPB
- **Cable Television.** Annual. 56-205-XPB
- **Retail Trade.** Monthly. 63-005-XPB
- **Wholesale Trade.** Monthly. 63-008-XPB
- **Direct Selling in Canada.** Annual. 63-218-XPB

Selected publications from other sources

- **Annual Report 1996-97.** Canadian Broadcasting Corporation. 1997.
- **Canadian Retailer.** Retail Council of Canada. Monthly.
- **Competition and Culture on Canada's Information Highway.** Canadian Radio-television and Telecommunications Commission. 1995.

## Communications, Transport and Trade

### Legend

-- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 12.1 Gross Domestic Product at Factor Cost, Communications, Transportation and Trade

	1992	1993	1994	1995	1996	1997
	\$ constant 1992 (millions)					
<b>Transportation and storage industries</b>	<b>26,078</b>	<b>26,523</b>	<b>27,707</b>	<b>28,172</b>	<b>28,253</b>	<b>29,645</b>
Transportation	22,562	22,853	23,789	24,145	24,102	25,408
Air transport and related services	3,195	3,053	3,123	3,240	3,486	3,697
Railway transport and related services	3,772	3,794	4,268	4,294	4,253	4,648
Water transport and related services	1,913	1,969	2,029	2,146	2,131	2,197
Truck transport	6,849	7,284	7,795	8,008	8,220	8,986
Public passenger transit systems	3,227	3,046	2,969	2,944	2,762	2,753
Urban transit systems	2,097	2,030	1,948	1,913	1,747	1,737
Interurban and rural transit systems	209	186	185	187	163	153
School and other bus operations	921	830	836	844	852	863
Other transportation and services incidental to transportation	3,606	3,707	3,605	3,513	3,250	3,127
Miscellaneous transport services	4,527	4,537	4,441	4,357	4,102	3,990
Pipeline transport	2,764	2,931	3,099	3,222	3,311	3,344
Natural gas pipeline transport	2,190	2,367	2,531	2,639	2,720	2,775
Crude oil and other pipeline transport	574	564	568	583	591	569
Storage and warehousing	752	739	819	805	840	893
Grain elevator industry	392	355	433	378	363	398
Other storage and warehousing industries	360	384	386	427	477	495
<b>Communications and other utility industries</b>	<b>41,909</b>	<b>42,524</b>	<b>44,628</b>	<b>46,062</b>	<b>47,978</b>	<b>49,629</b>
Communications industries	19,541	19,347	20,442	21,784	23,238	24,888
Telecommunications broadcasting	3,325	3,425	3,480	3,564	3,572	3,632
Cable television	1,128	1,171	1,202	1,233	1,245	1,258
Radio and television broadcasting	2,197	2,254	2,278	2,331	2,327	2,374
Postal and courier services	3,624	3,423	3,496	3,578	3,596	3,642
Telecommunications carriers	12,592	12,499	13,466	14,642	16,070	17,614
Other utility industries	22,368	23,177	24,186	24,278	24,740	24,741
Electric power systems	18,230	18,811	19,670	19,724	20,105	20,176
Gas distribution systems	2,267	2,374	2,427	2,509	2,662	2,634
Water systems and other utility	1,871	1,992	2,089	2,045	1,973	1,931
<b>Wholesale trade</b>	<b>30,892</b>	<b>31,421</b>	<b>34,167</b>	<b>34,996</b>	<b>36,234</b>	<b>40,143</b>
<b>Retail trade</b>	<b>35,262</b>	<b>36,065</b>	<b>38,145</b>	<b>38,385</b>	<b>38,608</b>	<b>40,618</b>

Source: Statistics Canada, CANSIM, matrix 4677.



12.2 Private and Public Capital Expenditures, Communications, Transportation, Storage and Trade<sup>1</sup>

	1993	1994	1995	1996	1997	1998
	\$ millions					
<b>Private and public investment in Canada</b>	<b>121,253.9</b>	<b>130,131.2</b>	<b>127,802.8</b>	<b>135,271.2</b>	<b>151,792.0</b>	<b>161,161.8</b>
<b>Communications, transportation, storage and trade</b>	<b>26,155.0</b>	<b>24,630.2</b>	<b>24,636.5</b>	<b>24,887.0</b>	<b>28,216.1</b>	<b>30,827.1</b>
<b>Communications industries</b>	<b>5,602.4</b>	<b>5,251.0</b>	<b>5,128.2</b>	<b>5,982.2</b>	<b>7,543.9</b>	<b>7,663.3</b>
Telecommunications broadcasting	657.6	701.5	891.8	1,068.5	1,109.4	1,015.6
Telecommunications carriers	4,686.4	4,344.3	4,092.4	4,751.4	6,208.6	6,400.9
Other telecommunications industries	28.9	46.4	18.5	39.7	25.1	22.2
Postal and courier services	229.5	158.8	125.4	122.6	200.8	224.6
<b>Transportation industries</b>	<b>2,707.4</b>	<b>3,607.0</b>	<b>3,577.7</b>	<b>4,380.3</b>	<b>4,958.2</b>	<b>5,953.5</b>
Air transport	531.0	1,003.6	825.4	977.6	1,426.1	1,639.9
Railway transport	651.0	656.6	685.5	855.6	1,070.0	1,629.0
Water transport	95.1	233.1	307.5	567.0	605.7	563.9
Truck transport	434.7	709.2	565.0	591.6	530.6	536.3
Public passenger transit	703.2	786.5	770.2	1,042.8	1,093.9	1,365.5
Other transportation industries	9.0	7.3	8.8	12.3	27.5	20.1
Services incidental to transportation	43.7	210.7	415.1	333.5	204.3	198.7
<b>Pipeline transport industries</b>	<b>2,046.5</b>	<b>2,081.2</b>	<b>1,907.6</b>	<b>1,521.5</b>	<b>2,132.9</b>	<b>2,393.6</b>
<b>Storage and warehousing industries</b>	<b>169.2</b>	<b>182.2</b>	<b>243.3</b>	<b>202.3</b>	<b>236.6</b>	<b>428.0</b>
Grain elevators	142.9	138.2	179.6	135.7	149.2	354.5
Other storage and warehousing industries	26.3	44.0	63.7	66.6	87.4	73.4
<b>Other utilities</b>	<b>10,662.7</b>	<b>8,417.0</b>	<b>8,131.7</b>	<b>7,393.9</b>	<b>7,262.7</b>	<b>8,486.7</b>
Electric power systems	8,723.3	6,493.7	5,971.2	5,080.0	5,187.8	6,246.1
Gas distribution systems	970.8	953.1	980.9	1,003.5	1,048.6	1,002.2
Water systems	738.3	808.9	978.7	1,114.4	873.9	1,041.5
Other utilities	230.2	161.3	201.0	196.1	152.4	196.9
<b>Trade</b>	<b>4,966.8</b>	<b>5,091.8</b>	<b>5,648.0</b>	<b>5,406.8</b>	<b>6,081.8</b>	<b>5,902.0</b>
Wholesale trade	1,911.2	1,826.6	2,434.5	2,539.5	2,981.8	2,882.0
Retail trade	3,055.6	3,265.2	3,213.5	2,867.3	3,100.0	3,020.0
Investment in communications, transportation, storage and trade as a percentage of total	21.6	18.9	19.3	18.4	18.6	19.1

1. Data for 1998 are revised intentions published on July 23, 1998.

Source: Statistics Canada, CANSIM, matrices 3104 and 3105.

## 12.3 Employment, Communications, Transportation and Trade

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>All industries<sup>2</sup></b>	<b>10,650.9</b>	<b>10,876.4</b>	<b>10,967.2</b>	<b>11,299.0</b>
<b>Transportation, communications and other utilities</b>	<b>858.3</b>	<b>857.3</b>	<b>839.3</b>	<b>851.4</b>
Transportation and storage	467.0	463.7	459.3	476
Transportation	443.1	439.2	434.9	450.8
Air transport	52.9	53.0	56.0	62.4
Services incidental to air transport	8.2	7.9	5.4	7.8
Railway transport and related services	57.3	53.4	50.6	48.6
Water transport	15.3	18.1	17.8	16.1
Services incidental to water transport	13.7	13.9	11.7	10.6
Truck transport	131.4	135.8	140.7	151.1
Public passenger transit systems	82.8	76.6	77.5	78.2
Other transportation	81.4	80.5	75.1	75.9
Pipeline transport	8.1	7.9	7.0	7.0
Storage and warehousing	15.8	16.6	17.3	18.2
Communications and other utilities	391.4	393.6	380.1	375.4
Communications	258.4	264.9	255.7	252.4
Telecommunications broadcasting	41.7	40.9	40.6	41.1
Telecommunications carriers	108.8	113.7	101.7	100.7
Other telecommunications	1.8	1.9	2.4	2.4
Postal and courier services	106.0	108.3	110.9	108.1
Utilities (electric power, gas, water)	133.0	128.6	124.4	123.0
Electric power systems	90.8	87.7	83.6	81.1
Gas distribution systems	15.8	16.0	16.4	16.5
Water systems	8.7	7.9	7.2	6.8
Other utilities	17.8	17.1	17.1	18.5
<b>Trade</b>	<b>1,960.9</b>	<b>2,034.0</b>	<b>2,047.8</b>	<b>2,124.4</b>
Wholesale trade	13.7	13.9	11.7	10.6
Farm products	11.1	11.1	12.7	12.7
Petroleum products	26.1	25.1	26.7	28.4
Food, beverage, drug and tobacco	93.5	99.3	102.9	110.3
Apparel and dry goods	16.7	19.2	17.6	19.3
Household goods	19.2	16.6	18.2	19.7
Motor vehicles, parts and accessories	57.2	64.2	64.9	67.8
Metals, hardware and building materials	103.2	110.2	108.8	116.4
Machinery, equipment and supplies	190.2	205.1	213.9	224.8
Other wholesale products	91.0	96.7	103.7	111.7
Retail trade	1,352.7	1,386.4	1,378.4	1,413.1
Food, beverage and drug	454.1	474.0	468.6	474.7
Shoes, apparel, fabric and yarn	132.4	136.9	139.7	144.3
Household furniture, appliances and furnishing	77.0	74.9	73.3	76.4
Automotive vehicles, parts and accessories, sales and services	304.4	307.9	307.0	314.1
General retail merchandising	183.1	184.0	180.8	185.1
Other retail stores	201.9	208.8	208.9	218.5

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4285.

## 12.4 Employment, Communications, Transportation and Trade, 1997

	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Y.T.	N.W.T.
Employees <sup>1</sup> (thousands)													
<b>All industries<sup>2</sup></b>	<b>11,299.0</b>	<b>144.9</b>	<b>45.9</b>	<b>314.9</b>	<b>253.1</b>	<b>2,700.6</b>	<b>4,422.8</b>	<b>425.0</b>	<b>335.3</b>	<b>1,162.2</b>	<b>1,454.9</b>	<b>14.2</b>	<b>25.3</b>
<b>Goods-producing industries</b>	<b>2,606.4</b>	<b>25.7</b>	<b>8.8</b>	<b>59.3</b>	<b>55.7</b>	<b>664.7</b>	<b>1,093.1</b>	<b>82.5</b>	<b>54.8</b>	<b>263.4</b>	<b>291.8</b>	<b>2.2</b>	<b>4.3</b>
Logging and forestry	66.9	1.9	x	2.4	4.9	16.4	8.1	0.6	1.1	2.3	28.8	x	x
Mining, quarrying and oil wells	143.4	2.8	x	3.1	3.2	15.5	21.2	3.9	10.1	68.1	12.7	x	x
Manufacturing	1,800.4	12.8	5.6	36.9	32.0	503.9	850.4	57.5	25.2	109.8	165.8	x	x
Construction	472.7	5.2	2.8	14.0	11.9	100.0	162.1	14.3	14.5	71.4	73.9	0.8	1.6
<b>Service-producing industries</b>	<b>8,597.9</b>	<b>118.1</b>	<b>36.7</b>	<b>254.3</b>	<b>195.3</b>	<b>2,010.8</b>	<b>3,296.8</b>	<b>339.6</b>	<b>276.1</b>	<b>887.9</b>	<b>1,149.9</b>	<b>11.8</b>	<b>20.7</b>
Transportation, communications and other utilities	851.4	13.4	3.0	24.5	22.1	196.2	313.2	42.6	27.5	92.7	112.5	1.5	2.4
Transportation and storage	476.0	5.1	2.0	11.7	12.6	109.2	160.3	26.3	14.8	57.7	73.9	0.6	1.7
Communications and other utilities	375.4	8.3	1.0	12.8	9.5	87.0	152.9	16.2	12.6	35.0	38.6	0.8	0.7
Trade	2,124.4	28.8	7.8	62.2	48.9	505.3	827.1	77.1	66.3	221.8	273.8	1.8	3.4
Wholesale trade	711.2	6.5	1.8	15.4	14.0	169.4	297.6	25.6	20.7	75.4	83.7	0.4	0.7
Retail trade	1,413.1	22.4	6.0	46.8	34.9	335.8	529.5	51.5	45.6	146.4	190.1	1.4	2.7
Finance, insurance, and real estate	704.2	6.9	2.1	17.0	12.3	154.5	310.3	26.4	23.1	61.1	89.1	0.5	0.9
Community, business and personal services	4,366.6	56.3	18.5	126.7	95.0	1,014.6	1,660.6	170.6	138.0	460.3	612.5	4.7	8.6
Public administration	674.3	15.6	5.5	26.7	20.8	169.2	237.0	29.1	25.1	63.7	72.5	3.5	5.7

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom no T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrices 4285, 4299, 4313, 4327, 4341, 4355, 4369, 4383, 4397, 4411, 4425, 4439 and 4453.



12.5 Earnings, Communications, Transportation and Trade<sup>1</sup>

	1994	1995	1996	1997
	Average weekly earnings <sup>2</sup> \$			
<b>All industries<sup>3</sup></b>	<b>568.3</b>	<b>573.8</b>	<b>586.1</b>	<b>598.3</b>
<b>Transportation, storage, communications and other utilities</b>	<b>716.0</b>	<b>729.2</b>	<b>735.3</b>	<b>754.6</b>
Transportation and storage	674.8	689.4	701.2	723.1
Transportation	670.0	684.5	695.0	716.3
Air transport	755.2	788.8	802.9	815.1
Services incidental to air transport	535.9	594.3	595.8	543.8
Railway transport and related services	911.5	942.2	976.7	999.3
Water transport	798.5	795.6	814.0	829.8
Services incidental to water transport	860.6	885.0	833.8	772.6
Truck transport	590.6	599.6	613.5	637.8
Public passenger transit systems	570.2	586.3	574.7	625.1
Other transportation	631.5	630.9	658.8	689.8
Pipeline transport	1,029.2	1,073.7	1,157.9	1,188.0
Storage and warehousing	630.1	634.7	672.8	710.9
Communications and other utilities	765.1	776.0	776.5	794.5
Communications	683.5	697.4	696.1	708.8
Telecommunications broadcasting	776.9	817.2	835.3	839.1
Telecommunications carriers	823.2	839.0	843.4	862.8
Other telecommunications	623.1	636.6	621.2	574.6
Postal and courier services	504.4	504.7	511.6	518.8
Utilities (electric power, gas, water)	923.5	938.0	941.9	970.4
Electric power systems	1,001.7	1,021.3	1,024.1	1,052.8
Gas distribution systems	866.1	859.1	885.9	936.3
Water systems	768.8	781.6	781.1	786.7
Other utilities	650.9	656.9	662.4	707.6
<b>Trade</b>	<b>421.8</b>	<b>431.4</b>	<b>439.7</b>	<b>451.9</b>
Wholesale trade	605.6	622.0	628.5	644.0
Farm products	481.0	521.0	518.7	527.9
Petroleum products	626.9	646.0	626.1	683.3
Food, beverage, drug and tobacco	576.8	560.9	581.8	587.9
Apparel and dry goods	527.0	496.8	499.6	544.5
Household goods	587.9	615.1	658.4	634.9
Motor vehicles, parts and accessories	589.8	612.4	625.1	650.6
Metals, hardware and building materials	547.5	572.2	585.9	593.0
Machinery, equipment and supplies	689.6	710.4	710.9	728.8
Other wholesale products	562.4	591.5	582.2	599.7
Retail trade	339.2	342.3	348.1	355.2
Food, beverage and drug	316.1	314.9	313.2	318.0
Shoes, apparel, fabric and yarn	266.3	262.5	263.9	267.3
Household furniture, appliances and furnishing	401.8	396.0	391.5	416.2
Automotive vehicles, parts and accessories, sales and services	446.9	456.9	482.8	500.5
General retail merchandising	278.8	279.7	283.8	294.4
Other retail stores	307.6	323.7	324.9	315.6

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4288.

**12.6 Private Television,<sup>1</sup> Revenues and Expenses**

	1990	1991	1992	1993	1994	1995	1996
	\$ thousands						
<b>Operating revenues</b>	<b>1,364,988</b>	<b>1,377,788</b>	<b>1,460,496</b>	<b>1,464,467</b>	<b>1,490,061</b>	<b>1,530,515</b>	<b>1,581,024</b>
Sales of air time	1,248,382	1,262,736	1,341,424	1,329,877	1,370,898	1,433,946	1,487,168
Local time sales	340,182	325,037	337,207	347,145	356,888	333,500	341,909
National time sales	734,069	937,699	787,570	796,530	788,773	879,541	891,930
Network time sales	174,131	—	216,647	186,202	225,236	220,905	238,882
Production and other	116,606	115,052	119,072	134,590	119,163	86,476	93,856
<b>Operating expenses</b>	<b>1,374,221</b>	<b>1,394,013</b>	<b>1,407,197</b>	<b>1,386,806</b>	<b>1,413,233</b>	<b>1,438,529</b>	<b>1,470,342</b>
Program	774,164	789,973	800,899	791,133	820,885	825,206	861,944
Technical services	74,084	70,164	71,865	71,566	71,520	75,486	75,946
Sales and promotion	149,799	147,222	148,085	156,002	154,202	168,201	172,057
Administration and general	226,131	223,063	220,131	212,367	220,629	210,069	199,434
Depreciation	54,499	54,068	55,709	54,992	56,066	55,674	58,835
Interest expense	95,544	109,523	110,508	100,746	89,930	103,893	102,126

1. Excludes the cable television, pay television and non-commercial broadcasting stations operated by religious groups, educational institutions and provincial governments.

Source: Statistics Canada, CANSIM, matrix 1810.

**12.7 Cable Television,<sup>1</sup> Revenues and Expenses**

	1990	1991	1992	1993	1994	1995	1996
	\$ thousands						
<b>Operating revenues</b>	<b>1,356,621</b>	<b>1,477,612</b>	<b>1,588,093</b>	<b>1,680,976</b>	<b>1,759,126</b>	<b>1,846,052</b>	<b>1,903,556</b>
<b>Operating expenses</b>	<b>1,173,569</b>	<b>1,298,424</b>	<b>1,342,858</b>	<b>1,497,559</b>	<b>1,535,035</b>	<b>1,795,346</b>	<b>1,926,974</b>
Program origination	61,371	63,269	68,389	75,145	80,197	85,384	85,541
Technical services	448,611	504,995	532,011	539,885	415,714	605,668	643,080
Sales and promotion	45,286	42,512	43,990	44,929	49,650	59,512	69,815
Administration and general	296,915	298,574	322,359	343,440	355,609	409,864	409,864
Depreciation	197,815	232,907	242,841	265,720	275,369	297,280	324,139
Interest expense	123,571	156,167	133,268	228,440	207,859	337,638	409,366
	thousands						
<b>Subscribers</b>	<b>7,121</b>	<b>7,286</b>	<b>7,463</b>	<b>7,657</b>	<b>7,833</b>	<b>7,791</b>	<b>7,867</b>
<b>Households wired for cable service</b>	<b>9,097</b>	<b>9,241</b>	<b>9,773</b>	<b>9,765</b>	<b>9,935</b>	<b>10,019</b>	<b>10,249</b>
	kilometres (thousands)						
<b>Cable length</b>	<b>153</b>	<b>157</b>	<b>168</b>	<b>169</b>	<b>180</b>	<b>181</b>	<b>190</b>

1. All cable television systems licensed to operate in Canada by the CRTC are included. Master antenna television and pay television stations are not included.

Source: Statistics Canada, CANSIM, matrix 1828.

12.8 Canadian Air Carriers,<sup>1</sup> Operating Revenues and Expenses

	1988	1989	1990	1991	1992	1993	1994 <sup>2</sup>	1995	1996
	\$ thousands								
<b>Operating revenues</b>	<b>7,136,850</b>	<b>7,860,686</b>	<b>8,271,245</b>	<b>7,602,801</b>	<b>7,548,389</b>	<b>7,535,257</b>	<b>8,406,365</b>	<b>9,319,702</b>	<b>10,038,104</b>
Scheduled services	5,562,090	6,024,095	6,412,344	5,909,761	5,884,911	5,792,261	6,330,483	7,030,379	7,693,554
Passenger	4,957,333	5,413,265	5,765,908	5,299,925	5,280,370	5,180,855	5,700,484	6,347,320	6,996,286
Goods	604,757	610,830	646,436	609,836	604,540	611,406	629,998	683,059	697,268
Charter services	1,244,815	1,439,352	1,508,799	1,389,527	1,395,349	1,439,459	1,734,719	1,851,761	1,906,124
Passenger	1,079,129	1,269,029	1,332,238	1,232,354	1,239,915	1,237,154	1,505,640	1,549,200	1,643,987
Goods	165,686	170,324	176,561	157,173	155,434	202,305	229,080	302,561	262,137
Other flying services	41,806	45,129	37,319	46,172	33,389	55,796	66,980	71,766	68,424
Subsidies	4,285	4,743	6,077	5,350	6,185	2,481	1,237	2,014	538
Net incidental air transport related revenue	283,854	347,367	306,706	251,992	228,556	245,260	272,947	363,781	369,464
<b>Operating expenses</b>	<b>6,879,902</b>	<b>7,777,510</b>	<b>8,273,002</b>	<b>7,852,869</b>	<b>7,784,349</b>	<b>7,548,483</b>	<b>7,996,699</b>	<b>8,924,487</b>	<b>9,763,866</b>
Ground maintenance	96,693	110,012	107,880	98,130	185,543	177,787	223,820	242,550	198,386
Aircraft operations	2,375,143	2,827,637	3,029,675	2,771,063	2,678,847	2,703,104	2,895,775	3,259,795	3,716,188
Flight equipment maintenance	870,697	994,609	1,013,588	944,668	876,847	908,318	1,030,056	1,159,017	1,209,835
General services and administration	3,228,863	3,539,597	3,799,126	3,672,522	3,694,920	3,396,622	3,484,949	3,890,546	4,248,822
Depreciation	308,507	305,656	322,734	366,487	348,192	362,651	362,099	372,579	390,635

1. Only level I – IV air carriers that, in each of the two calendar years immediately preceding the report year, realized annual gross revenues of \$250,000 or more, transported 5,000 or more revenue passengers, or transported 1,000 or more tonnes of revenue goods.

2. Revised data.

Source: Statistics Canada, Catalogue no. 51-206-XPB.

12.9 Operating Statistics of Canadian Air Carriers<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>All air carriers</b>									
Number of passengers (thousands)	35,987	37,199	36,777	31,779	32,202	31,483	32,868	35,999	39,477
Cargo and mail carried (tonnes)	629,701	661,886	656,076	624,668	618,833	653,656	683,873	690,875	759,648
Passenger-kilometres (thousands) <sup>2</sup>	63,757,233	68,417,945	66,758,636	58,077,168	62,189,539	60,752,162	65,739,524	73,492,415	80,071,826
Goods tonne-kilometres (thousands) <sup>2</sup>	1,611,937	1,703,068	1,740,747	1,573,257	1,497,977	1,646,141	1,798,669	2,034,471	2,168,148
Hours flown (thousands)	2,051	2,241	2,254	2,092	2,046	1,989	2,102	1,739	2,416
<b>Scheduled services</b>									
Number of passengers (thousands)	30,176	30,734	30,351	26,105	26,254	25,348	26,110	29,579	33,569
Cargo and mail carried (tonnes)	471,813	490,865	500,764	479,075	474,519	522,326	516,712	517,754	535,980
Passenger-kilometres (thousands) <sup>2</sup>	48,737,033	50,390,650	50,117,748	42,774,558	45,069,463	43,887,217	47,196,369	54,723,375	63,373,785
Goods tonne-kilometres (thousands) <sup>2</sup>	1,389,474	1,462,549	1,560,326	1,403,829	1,410,503	1,564,809	1,661,866	1,850,697	1,972,293
Hours flown (thousands)	1,153	1,256	1,278	1,193	1,238	1,167	1,193	1,306	1,445



**12.9 Operating Statistics of Canadian Air Carriers<sup>1</sup> (concluded)**

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Charter services</b>									
Number of passengers (thousands)	5,812	6,465	6,427	5,674	5,949	6,135	6,758	6,420	5,908
Cargo and mail carried (tonnes)	157,888	171,021	155,313	145,593	144,314	131,330	167,161	173,121	223,668
Passenger-kilometres (thousands) <sup>2</sup>	15,020,200	18,027,295	16,640,889	15,302,610	17,120,076	16,864,946	18,543,155	18,769,040	16,698,040
Goods tonne-kilometres (thousands) <sup>2</sup>	222,463	240,519	180,420	169,427	87,474	81,332	136,803	183,775	195,856
Hours flown (thousands)	898	985	977	899	808	823	908	433	971

1. Only levels I-IV air carriers that, in each of the two calendar years immediately preceding the report year, realized annual gross revenues of \$250,000 or more, transported 5,000 or more revenue passengers, or transported 1,000,000 or more tonnes of revenue goods.

2. Level IV air carriers not included.

Source: Statistics Canada, Catalogue no. 51-206-XPB.

**12.10 Railway Carriers, Revenues and Expenses**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	\$ thousands										
<b>Operating revenues</b>	<b>7,570,483</b>	<b>7,899,255</b>	<b>8,003,139</b>	<b>7,446,645</b>	<b>7,068,378</b>	<b>7,156,652</b>	<b>6,909,544</b>	<b>6,992,827</b>	<b>7,510,192</b>	<b>7,207,440</b>	<b>7,180,061</b>
Freight transportation	6,216,841	6,562,532	6,571,037	6,084,497	5,993,115	6,184,085	5,930,457	5,959,792	6,584,631	6,367,583	6,386,604
Passenger transportation	250,025	244,741	276,843	317,552	219,130	154,985	158,639	168,592	180,033	179,470	185,738
Services to VIA	243,327	181,447	145,142	129,174	84,976	67,472	67,434	65,474	62,874	58,535	61,174
Government payments	649,573	705,643	764,015	653,387	515,043	491,038	498,148	499,796	434,418	377,444	324,656
Other revenue	210,717	204,892	246,102	262,035	256,114	259,072	254,866	299,173	248,236	224,407	221,889
<b>Expenses</b>	<b>6,787,364</b>	<b>6,838,334</b>	<b>6,979,010</b>	<b>7,080,291</b>	<b>6,716,893</b>	<b>6,849,456</b>	<b>7,785,996</b>	<b>6,604,944</b>	<b>6,677,161</b>	<b>7,350,643</b>	<b>6,773,178</b>
Ways and structures	1,182,877	1,222,481	1,271,674	1,258,855	1,237,998	1,225,545	1,278,903	1,278,062	1,222,101	1,192,365	1,202,909
Equipment	1,759,826	1,811,269	1,799,923	1,826,355	1,672,911	1,598,890	1,546,689	1,524,928	1,553,111	1,538,562	1,484,124
Rail operations	2,330,982	2,305,853	2,362,856	2,315,022	2,288,248	2,255,963	2,297,247	2,269,402	2,396,098	2,334,471	2,364,292
General	1,513,679	1,498,731	1,544,557	1,680,059	1,517,736	1,769,058	2,663,157	1,532,552	1,505,851	2,285,246	1,721,853

Source: Statistics Canada, Catalogue no. 52-216-XPB.

## 12.11 Railway Track Lengths, 1996

	All railways	Class I			Classes II and III
		Canadian National	Canadian Pacific	VIA Rail	
kilometres					
Track owned and operated	65,403	37,704	20,086	92	7,521
Track owned	45,756	25,841	14,099	92	5,724
Mainline	3,427	2,062	1,096	—	269
Branch line	—	—	—	—	—
Yards	16,220	9,801	4,891	-	1,528
Track operated <sup>1</sup>	11,984	3,382	5,671	—	2,932
Mainline	6,073	467	3,566	—	2,040
Branch line	730	64	454	—	211
Yards	5,182	2,850	1,651	—	681

1. Under lease, trackage rights or jointly owned.

Source: Statistics Canada, Catalogue no. 52-216-XPB.

## 12.12 Department Store Sales

	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ thousands								
<b>Canada</b>	<b>13,914,295</b>	<b>14,192,795</b>	<b>12,913,325</b>	<b>13,011,856</b>	<b>12,793,896</b>	<b>13,298,958</b>	<b>13,839,630</b>	<b>14,446,830</b>	<b>15,929,342</b>
Newfoundland	166,033	207,477	183,185	180,480	180,996	201,955	..	..	..
Prince Edward Island	89,703	86,386	54,628	54,728	54,243	54,712	..	..	..
Nova Scotia	467,729	474,834	434,828	438,358	442,876	445,741	456,295	469,668	505,616
New Brunswick	311,646	316,298	289,517	297,524	297,759	328,130	344,271	352,769	379,502
Quebec	2,604,412	2,658,569	2,405,423	2,345,978	2,313,854	2,412,466	2,530,630	2,649,676	2,884,549
Ontario	5,795,838	5,832,635	5,297,682	5,396,775	5,385,283	5,586,889	5,779,118	6,032,591	6,707,832
Manitoba	585,971	604,166	534,552	537,233	530,852	553,603	589,947	613,846	661,854
Saskatchewan	392,970	411,987	368,846	368,306	362,942	393,300	436,011	463,730	517,659
Alberta	1,549,888	1,584,157	1,454,822	1,434,761	1,370,812	1,423,183	1,510,338	1,589,434	1,811,890
British Columbia	1,950,103	2,016,292	1,889,833	1,957,710	1,854,278	1,898,982	1,927,349	2,002,301	2,162,111

Source: Statistics Canada, CANSIM, matrix 112.

**12.13 Motor Vehicle Registrations, by Type**

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>All motor vehicle registrations</b>	<b>16,336,261</b>	<b>16,719,558</b>	<b>16,981,130</b>	<b>16,443,808</b>	<b>16,580,960</b>	<b>16,716,476</b>	<b>16,970,448</b>	<b>17,047,635</b>	<b>17,231,920</b>
Passenger automobiles	12,086,001	12,380,258	12,622,038	12,577,578	12,781,067	12,926,778	13,122,477	13,182,996	13,217,336
Trucks and truck tractors	3,706,032	3,826,963	3,867,385	3,399,449	3,349,502	3,346,111	3,401,846	3,420,277	3,579,497
Motorcycles	369,758	348,125	331,075	322,256	311,988	307,191	304,485	297,298	289,700
Buses	59,834	62,494	63,962	63,898	63,912	63,621	64,458	64,339	64,155
Mopeds	30,559	29,872	27,940	27,293	26,516	25,561	23,919	22,281	21,088
Other road motor vehicles	84,077	71,846	68,730	53,334	47,974	47,214	53,263	60,444	60,144

Source: Statistics Canada, CANSIM, matrix 356.

**12.14 Motor Vehicle Registrations**

	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Canada</b>	<b>16,336,261</b>	<b>16,719,558</b>	<b>16,981,130</b>	<b>16,443,808</b>	<b>16,580,960</b>	<b>16,716,476</b>	<b>16,970,448</b>	<b>17,047,635</b>	<b>17,231,920</b>
Newfoundland	307,049	301,152	305,851	306,482	312,040	309,921	322,652	311,710	308,494
Prince Edward Island	82,531	88,084	84,716	86,507	88,216	90,537	91,310	92,219	91,546
Nova Scotia	512,067	566,902	603,615	525,225	532,689	536,222	533,182	547,832	550,299
New Brunswick	451,562	455,251	475,671	433,941	446,040	428,495	442,538	434,893	430,797
Quebec	3,432,035	3,527,761	3,580,765	3,624,479	3,663,513	3,697,068	3,742,306	3,781,003	3,844,541
Ontario	5,804,105	5,943,747	6,000,322	6,083,956	6,157,627	6,231,948	6,304,626	6,330,679	6,351,505
Manitoba	769,976	775,267	779,069	696,502	691,603	690,481	696,600	685,244	630,603
Saskatchewan	755,350	736,638	735,964	703,536	703,770	699,870	725,649	712,467	779,801
Alberta	1,820,141	1,850,771	1,861,662	1,875,212	1,878,707	1,910,612	1,935,076	1,934,863	1,962,789
British Columbia	2,350,437	2,420,890	2,499,485	2,039,935	2,054,368	2,067,163	2,117,486	2,156,609	2,220,653
Yukon Territory	27,077	27,072	30,952	40,851	25,408	27,436	32,301	32,407	33,005
Northwest Territories	21,831	25,729	23,058	27,182	26,979	26,723	26,721	27,709	27,926

Source: Statistics Canada, CANSIM, matrices 356, 359, 360, 363, 364, 367, 368, 371, 372, 375, 376, 379 and 380.

**12.15 New Motor Vehicle Sales**

	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>New motor vehicles</b>	<b>1,483,875</b>	<b>1,317,852</b>	<b>1,287,790</b>	<b>1,227,419</b>	<b>1,192,934</b>	<b>1,260,056</b>	<b>1,166,535</b>	<b>1,204,557</b>	<b>1,424,380</b>
<b>Passenger cars</b>	<b>988,134</b>	<b>884,564</b>	<b>873,184</b>	<b>798,023</b>	<b>739,049</b>	<b>748,666</b>	<b>670,190</b>	<b>660,769</b>	<b>738,550</b>
North American	675,340	580,397	573,297	503,460	493,759	573,361	553,265	572,581	629,488
Imports	312,794	304,167	299,887	294,563	245,290	175,305	116,925	88,188	109,062
<b>Commercial vehicles</b>	<b>495,741</b>	<b>433,305</b>	<b>414,606</b>	<b>429,396</b>	<b>453,885</b>	<b>511,390</b>	<b>496,345</b>	<b>543,788</b>	<b>685,830</b>
North American	422,398	361,403	347,671	370,422	402,112	475,444	469,590	517,738	628,214
Imports	73,343	71,902	66,935	58,974	51,773	35,946	26,755	26,050	57,616

Source: Statistics Canada, CANSIM, matrix 64.



12.16 Fuel Sales<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	litres (thousands)								
<b>Canada</b>	<b>31,718,186</b>	<b>32,038,416</b>	<b>31,842,330</b>	<b>31,209,092</b>	<b>31,786,778</b>	<b>32,563,430</b>	<b>33,297,035</b>	<b>33,493,895</b>	<b>33,842,542</b>
Newfoundland	568,172	583,386	572,472	573,614	578,270	585,091	591,489	582,906	557,149
Prince Edward Island	175,611	175,896	177,133	168,763	172,143	174,007	182,350	183,610	187,175
Nova Scotia	1,095,247	1,105,209	1,113,673	1,065,925	1,082,148	1,085,350	1,104,480	1,123,568	1,132,802
New Brunswick	999,483	970,293	956,257	904,505	929,763	961,131	1,001,020	1,000,675	1,005,236
Quebec	6,843,471	7,051,184	6,982,566	6,823,648	6,868,325	7,037,733	7,199,940	7,442,203	7,510,245
Ontario	12,368,600	12,660,325	12,129,200	11,887,265	11,982,500	12,255,200	12,530,021	12,482,989	12,575,442
Manitoba	1,339,359	1,341,072	1,298,488	1,250,175	1,244,457	1,253,892	1,278,402	1,267,701	1,271,675
Saskatchewan	870,373	683,659	1,193,109	1,169,700	1,445,521	1,373,463	1,297,605	1,258,584	1,300,639
Alberta	3,768,243	3,774,250	3,788,294	3,746,700	3,718,700	3,873,700	3,924,600	3,910,900	4,024,600
British Columbia	3,597,655	3,599,180	3,539,953	3,527,620	3,666,882	3,869,461	4,082,964	41,349,893	4,172,348
Yukon Territory	60,661	60,155	57,932	59,047	65,358	61,276	66,373	68,531	69,309
Northwest Territories	31,310	33,807	33,253	32,130	32,711	33,126	37,791	37,245	35,922

1. Sales are net sales. They represent the amount of taxable fuel consumed on public roads and streets in Canada.

Source: Statistics Canada, Catalogue no. 53-218-XPB.

## 12.17 Passenger and Urban Transit Bus Industry

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
	\$ millions										
<b>Revenues<sup>1</sup></b>	<b>3,412.7</b>	<b>3,671.4</b>	<b>3,782.8</b>	<b>4,264.4</b>	<b>4,358.1</b>	<b>4,424.1</b>	<b>4,604.1</b>	<b>4,588.7</b>	<b>4,691.1</b>	<b>4,793.0</b>	<b>5,319.6</b>
Scheduled intercity carriers	335.9	346.9	332.9	362.0	404.5	408.1	397.4	361.7	380.6	367.9	341.7
Urban transit	2,282.9	2,443.7	2,581.8	2,986.8	3,109.4	3,064.1	3,119.0	3,136.4	3,097.5	3,129.3	3,676.2
School buses	639.5	710.8	700.1	744.0	676.4	767.3	873.2	860.5	1,014.7	1,052.6	1,032.1
Charter and other passenger buses	154.4	170.0	168.0	171.6	167.8	184.6	214.5	230.1	198.3	243.2	269.7
<b>Expenses</b>	<b>3,070.7</b>	<b>3,252.5</b>	<b>3,394.6</b>	<b>3,681.4</b>	<b>3,903.1</b>	<b>4,340.0</b>	<b>4,543.5</b>	<b>4,579.1</b>	<b>4,627.8</b>	<b>4,795.7</b>	<b>4,861.9</b>
Scheduled intercity carriers	316.1	320.8	320.0	316.4	385.6	388.8	382.3	344.4	349.6	352.9	329.5
Urban transit	2,057.6	2,147.4	2,301.6	2,531.5	2,722.3	3,051.5	3,140.8	3,246.0	3,167.6	3,223.8	3,247.7
School buses	552.8	626.9	617.9	672.0	632.6	722.9	813.1	768.0	929.7	993.6	1,023.5
Charter and other passenger buses	144.2	157.4	155.1	161.5	162.6	176.8	207.3	220.7	180.9	225.4	261.2
	millions										
<b>Passengers carried<sup>2</sup></b>	<b>1,545.2</b>	<b>1,492.0</b>	<b>1,533.3</b>	<b>1,537.6</b>	<b>1,545.4</b>	<b>1,466.0</b>	<b>1,445.9</b>	<b>1,407.4</b>	<b>1,372.1</b>	<b>1,372.2</b>	<b>1,363.1</b>

1. Includes subsidies.

2. Only for intercity carriers and urban transit.

Source: Statistics Canada, Catalogue no. 53-215-XPB.

**12.18 Oil Pipeline Transport**

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	cubic metres (millions)								
<b>Crude oil</b>									
Canadian crude oil production	100.3	97.2	96.9	96.7	100.9	105.8	110.5	281.1	282.7
Pipeline imports	4.7	6.6	7.4	9.6	10.1	10.9	11.4	10.2	13.0
Pipeline exports	39.0	36.2	38.0	42.8	47.2	52.1	56.1	60.4	63.5
Net receipts of crude oil into pipeline	109.4	108.4	109.0	110.2	115.5	123.4	128.8	230.9	232.2
	kilometres								
<b>Pipeline distance</b>									
Gathering <sup>1</sup>	9,137.5	10,288.3	10,376.7	10,895.8	10,997.7	11,112.3	10,795.1	10,906.0	11,097.1
Truck-crude	19,482.7	19,425.6	19,546.6	19,373.9	19,406.0	19,259.2	19,874.0	20,003.6	20,026.9
Product lines	5,107.6	5,148.7	5,150.0	5,455.5	5,627.5	5,969.2	5,991.5	5,991.5	5,834.8
Cubic metre kilometres (millions)	130,000.0	124,524.3	121,770.0	117,846.7	121,823.4	118,300.0	119,039.5	123,160.4	124,501.0
Average kilometres per cubic metre	761.7	724.6	705.3	679.0	676.5	618.0	593.4	595.1	570.9
	number								
<b>Compressor stations</b>	<b>247</b>	<b>257</b>	<b>246</b>	<b>250</b>	<b>252</b>	<b>252</b>	<b>262</b>	<b>262</b>	<b>265</b>
	\$ millions								
<b>Financial statistics</b>									
Operating revenues	905.9	920.5	977.8	1,011.0	1,023.8	1,050.1	1,074.3	1,162.4	1,188.8
Operating expenses	398.8	424.7	466.1	497.9	514.5	534.2	547.6	524.6	525.0
Net income	284.8	283.6	258.7	607.2	221.6	201.9	216.7	290.0	265.9
Property account	3,265.2	3,450.9	3,657.2	3,802.3	4,024.2	4,187.4	4,543.3	4,709.3	4,804.9
Long-term debt	1,366.3	1,362.5	1,357.8	1,598.4	1,366.7	1,705.4	2,095.2	2,141.1	2,449.0

1. Excludes producers' gathering lines.

Source: Statistics Canada, Catalogue no. 55-201-XPB.

## 12.19 Wholesale Merchants' Inventories

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average value (\$ millions)									
<b>All trade groups</b>	<b>24,772.2</b>	<b>24,404.7</b>	<b>24,105.0</b>	<b>23,625.7</b>	<b>24,720.3</b>	<b>26,602.7</b>	<b>28,349.4</b>	<b>31,753.6</b>	<b>33,295.5</b>	<b>36,787.7</b>
Food, beverage, drug and tobacco products	2,612.6	2,611.0	2,609.4	2,702.9	3,017.4	...	...	...	...	...
Food products	..	..	..	..	..	2,170.1	2,202.4	2,296.8	2,332.6	2,557.3
Beverage, drug and tobacco products	..	..	..	..	..	1,229.5	1,330.5	1,531.7	1,737.7	1,884.3
Apparel and dry goods	945.2	802.5	781.3	774.9	879.2	1,002.0	1,004.0	987.2	1,019.6	1,098.6
Household goods	1,183.1	1,197.1	1,172.1	1,057.8	1,180.9	1,266.6	1,349.7	1,494.9	1,428.4	1,466.4
Motor vehicles, parts and accessories	3,263.2	3,353.5	3,441.9	3,449.5	3,559.4	4,298.1	4,388.0	4,885.9	4,776.7	5,045.1
Metals, hardware, plumbing and heating equipment and supplies	2,150.4	2,083.2	1,908.7	1,978.9	2,113.6	2,222.0	2,515.4	2,756.8	2,765.3	3,102.4
Lumber and building materials	2,596.1	2,443.4	2,430.9	2,227.4	2,422.6	2,661.1	2,882.8	3,144.7	3,055.8	3,322.2
Farm machinery, equipment and supplies	1,747.6	1,624.4	1,526.5	1,375.2	1,364.8	1,239.2	1,459.3	1,549.8	1,627.2	1,955.4
Other machinery, equipment and supplies	6,886.7	7,332.6	7,163.6	7,019.0	7,074.0	...	...	...	...	...
Industrial and other machinery equipment and supplies	..	..	..	..	..	5,524.2	5,825.0	6,906.4	7,676.0	8,697.3
Computers, packaged software and other electronic machinery	..	..	..	..	..	1,590.0	1,595.4	1,749.7	2,116.4	2,392.6
Other products	3,387.3	2,957.1	3,070.6	3,040.1	3,108.5	3,400.1	3,796.9	4,449.8	4,759.8	5,266.2

Source: Statistics Canada, CANSIM, matrix 59.

## 12.20 Wholesale Merchants' Sales

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>All trade groups</b>	<b>190,211.2</b>	<b>188,767.7</b>	<b>182,822.4</b>	<b>176,843.1</b>	<b>190,329.9</b>	<b>217,244.7</b>	<b>244,355.2</b>	<b>260,112.9</b>	<b>283,802.2</b>	<b>325,512.0</b>
Food, beverage, drug and tobacco products	40,736.0	41,833.3	42,984.2	45,116.2	49,428.7	...	...	...	...	...
Food products	..	..	..	..	..	41,882.3	43,024.3	43,659.8	46,332.3	50,248.7
Beverage, drug and tobacco products	..	..	..	..	..	13,552.2	14,533.1	16,511.3	18,985.0	21,252.6
Apparel and dry goods	5,180.4	4,854.5	4,227.2	4,239.7	4,708.3	5,360.7	5,317.0	5,120.9	5,368.7	6,199.3
Household goods	7,264.3	6,618.5	6,558.8	6,219.9	6,792.6	7,054.1	7,605.2	7,434.3	7,855.4	9,124.7
Motor vehicles, parts and accessories	20,392.1	21,385.5	20,801.1	20,744.5	20,875.9	32,934.0	40,075.3	42,630.8	48,656.5	57,468.6
Metals, hardware, plumbing and heating equipment and supplies	16,609.7	16,408.4	13,970.9	12,559.3	13,189.3	14,367.4	18,231.2	18,405.8	19,167.0	21,537.4
Lumber and building materials	19,866.9	19,251.2	17,646.0	15,863.9	17,523.7	19,387.7	20,855.2	21,063.9	22,169.8	25,576.6
Farm machinery, equipment and supplies	5,398.2	4,642.2	4,274.3	3,675.0	4,145.2	4,619.7	5,563.6	5,900.8	7,399.2	8,770.6
Other machinery, equipment and supplies	43,986.2	45,068.4	42,611.4	39,261.3	43,561.0	...	...	...	...	...
Industrial and other machinery equipment and supplies	..	..	..	..	..	30,688.7	33,745.2	37,789.1	41,008.3	48,398.8
Computers, packaged software and other electronic machinery	..	..	..	..	..	15,010.6	18,694.2	20,297.2	25,272.8	29,228.8
Other products	30,777.5	28,705.8	29,748.6	29,163.2	30,105.3	32,387.3	36,711.0	41,299.2	41,587.3	47,705.9
Newfoundland	1,930.1	2,026.3	1,996.2	1,960.1	1,995.0	2,067.0	2,062.4	2,133.8	2,098.2	2,208.3
Prince Edward Island	395.2	486.4	444.0	431.6	522.2	488.0	523.0	521.1	556.7	543.4
Nova Scotia	4,742.1	4,851.1	4,625.5	4,235.0	4,189.4	4,481.1	4,813.0	5,148.4	5,510.9	6,048.7
New Brunswick	3,306.5	3,499.6	3,220.7	2,906.8	2,882.3	2,836.4	3,023.9	3,160.8	3,346.7	3,773.5
Quebec	48,079.0	47,148.6	45,932.3	43,911.6	47,194.4	49,243.2	51,840.8	53,942.8	56,822.0	63,447.1
Ontario	78,747.2	76,699.6	73,523.8	72,999.5	79,145.7	95,672.3	112,125.9	121,456.9	134,782.0	156,000.6
Manitoba	6,188.5	6,206.5	6,015.4	5,841.0	6,571.1	6,939.3	7,582.7	8,142.6	9,251.0	11,182.8
Saskatchewan	5,750.0	6,270.8	6,178.5	5,785.0	5,629.7	6,455.2	7,323.9	8,506.5	9,072.1	10,481.9
Alberta	17,394.1	17,143.7	17,141.8	16,472.6	17,194.2	19,547.3	23,108.4	23,583.6	26,468.2	32,882.0
British Columbia	23,387.6	24,153.5	23,529.0	22,089.7	24,756.0	29,240.7	31,702.6	33,240.3	35,594.2	38,622.3
Yukon Territory	..	..	..	..	..	137.8	121.4	129.7	144.9	146.2
Northwest Territories	..	..	..	..	..	136.4	127.1	146.7	155.4	175.1

Source: Statistics Canada, CANSIM, matrix 648.

## 12.21 Retail Sales

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions									
<b>Canada</b>	<b>181,651.8</b>	<b>189,301.7</b>	<b>192,558.3</b>	<b>181,614.6</b>	<b>185,169.5</b>	<b>194,324.8</b>	<b>207,840.8</b>	<b>213,773.6</b>	<b>220,430.9</b>	<b>237,277.7</b>
Food	43,027.0	44,480.0	46,420.6	47,085.2	48,301.1	50,626.6	52,624.0	53,493.5	53,334.8	55,949.5
Supermarkets and grocery stores	39,708.9	40,740.6	42,474.7	43,475.6	45,166.6	47,181.6	48,793.0	49,161.6	48,917.5	51,655.4
All other food stores	3,318.1	3,739.4	3,945.9	3,609.6	3,134.5	3,445.0	3,831.0	4,331.9	4,417.3	4,294.1
Drug and patent medicine stores	8,310.6	8,965.3	9,476.4	9,826.7	10,687.0	11,795.9	11,869.7	11,705.3	12,107.0	12,297.8
Clothing	11,376.8	11,823.1	11,918.1	10,783.3	10,778.0	11,510.2	12,377.3	12,911.4	12,923.1	13,384.9
Shoe stores	1,737.9	1,819.3	1,825.5	1,593.5	1,502.6	1,604.7	1,751.3	1,682.1	1,682.5	1,649.9
Men's clothing stores	1,974.9	2,045.8	2,076.1	1,717.5	1,662.8	1,730.3	1,686.5	1,623.3	1,516.0	1,569.5
Women's clothing stores	3,925.6	4,002.5	3,999.6	3,703.6	3,693.5	3,872.2	4,127.3	4,228.7	4,202.5	4,335.2
Other clothing stores	3,738.4	3,955.5	4,016.9	3,768.7	3,919.1	4,303.0	4,812.2	5,377.3	5,522.1	5,830.3
Furniture	10,841.8	11,376.5	11,208.5	9,484.9	9,812.1	10,581.8	10,874.9	10,723.4	10,548.1	11,605.2
Household furniture and appliance stores	8,401.3	8,838.2	8,596.9	7,446.0	7,678.1	8,428.7	8,748.6	8,656.5	8,469.4	9,305.3
Household furnishings stores	2,440.5	2,538.3	2,611.6	2,038.9	2,134.0	2,153.1	2,126.3	2,066.9	2,078.7	2,299.9
Automotive	66,489.0	69,066.1	69,370.9	62,794.5	63,287.8	67,352.9	74,840.0	78,146.0	83,970.2	92,765.0
Motor vehicle and recreational vehicle dealer	41,978.1	42,893.5	41,695.1	37,761.5	38,822.1	42,213.3	48,744.5	52,059.6	55,502.9	62,830.1
Gasoline service stations	13,587.6	14,362.0	15,355.0	14,362.0	14,181.6	14,279.8	14,256.0	14,765.7	16,334.5	16,306.7
Automotive parts, accessories and services	10,923.3	11,810.6	12,320.8	10,671.0	10,284.1	10,859.8	11,839.5	11,320.7	12,132.8	13,628.2
General merchandise stores	19,871.2	20,532.8	21,353.8	20,702.4	20,898.0	20,581.6	21,679.4	22,804.8	24,008.9	26,182.6
Other retail stores	21,735.5	23,058.0	22,810.0	20,937.3	21,405.5	21,876.0	23,575.1	23,989.8	23,538.9	25,092.7
Other semi-durable goods stores	6,495.5	7,006.1	6,950.8	6,013.2	6,438.0	6,711.4	7,265.7	7,221.8	7,518.5	8,187.8
Other durable goods stores	5,237.7	5,572.1	5,474.8	4,897.9	4,931.8	5,198.4	5,595.5	5,474.6	5,551.2	6,008.2
All other retail stores	10,002.3	10,479.8	10,384.4	10,026.2	10,035.7	9,966.2	10,713.9	11,293.4	10,469.2	10,896.7
Newfoundland	3,168.0	3,356.1	3,527.4	3,405.4	3,364.1	3,339.8	3,430.0	3,510.2	3,489.8	3,703.7
Prince Edward Island	760.0	787.7	817.7	760.4	796.0	839.9	857.1	893.9	926.5	996.2
Nova Scotia	6,034.0	6,210.0	6,214.9	5,869.7	6,130.2	6,424.7	6,559.5	6,482.9	7,033.8	7,293.6
New Brunswick	4,418.4	4,621.3	4,776.7	4,611.0	4,772.3	4,985.3	4,974.0	5,136.3	5,426.3	5,584.5
Quebec	46,583.3	47,192.0	47,578.3	44,864.2	44,837.2	46,889.8	49,597.9	49,291.9	51,778.2	55,539.5
Ontario	69,791.1	72,567.8	72,568.4	67,349.1	68,885.2	71,743.6	76,892.6	79,623.4	80,199.4	86,457.8
Manitoba	6,336.7	6,599.0	6,596.4	6,293.1	6,403.5	6,695.3	7,020.3	7,432.1	7,920.1	8,588.9
Saskatchewan	5,677.3	5,757.7	5,688.6	5,316.7	5,364.4	5,701.8	6,192.3	6,491.0	7,023.8	7,621.9
Alberta	17,563.2	18,874.8	20,023.0	19,004.7	19,515.6	20,545.1	22,224.8	22,733.3	23,805.8	26,938.7
British Columbia	20,802.0	22,790.6	24,199.8	23,613.2	24,512.0	26,552.6	29,442.5	31,496.2	32,070.8	33,736.0
Yukon Territory and Northwest Territories	518.3	544.9	567.0	527.0	589.7	607.1	649.4	682.7	756.7	817.3

Source: Statistics Canada, CANSIM, matrix 2400.







## *Finance and Services*

### **C h a p t e r**

### **T h i r t e e n**

*From the moment the first settlers arrived in New France and established hospitals, inns and taverns, there has been a services industry in Canada. To the extent that the settlers also set about constructing homes, farming the land and mining the resources of both the land and the sea, there has also been a goods-producing sector.*

*Today, economic life has progressed, or we might say has become more complex.*

For instance, we now flip burgers, make blue jeans and design and manufacture cars. We sit in control towers and direct airplanes to land safely on the ground. We create software that helps us run large corporations or that helps take us to other planets in the solar system. In our universities, professors give lectures on everything from mathematics to the love life of the polar bear.

To make sense of all these activities, economists have divided them into two categories: the goods-producing industries and the service-producing industries. The goods-producing industries are about the manufacture of products—everything from hamburgers to blue jeans to cars.

The services industries, on the other hand, are about a wide range of activities, from the prosaic to the exalted. When a teenager flips a burger at the local greasy spoon, that is a service. When the minister of finance delivers a budget in the House of Commons, this too is a service.

The services industry is by far and away the larger of the two categories of industries in Canada and its share of the Canadian economy has been growing steadily. In 1997, it employed no fewer than 70% of the Canadian work force.

(Services can be defined to include four major categories. These are communications, transport and trade; government; finance, insurance and real estate; and community business and personal services. This chapter discusses these last two categories. However, community services are mentioned only briefly, and are dealt with in depth in the chapters on health, education and government.)

While the finance, insurance and real estate category accounts for about 18% of GDP, community and personal services account for 50% of GDP and 38% of all employment. Together, the two categories account for nearly two-thirds of GDP and are quickly approaching 50% of employment.

## FINANCE, INSURANCE AND REAL ESTATE

Finance, insurance and real estate comprises a group of services whose foundations were established in the 19th century. Canada's first bank opened in Montréal in 1817, and still operates today as the Bank of Montréal. By 1900, there were 36 chartered banks operating in Canada. Their present-day equivalents—the so-called Schedule I banks—are only six in number.

Property insurance institutions were the next financial industries to appear. By the 1830s, in both Upper and Lower Canada, a number of fire insurance companies were operating locally. Canada's first life insurance company was founded in Hamilton, Canada West (Ontario), in 1847.

Stock trading began informally in 1832 in Montréal's Exchange Coffee House. In 1842, the arrangement was formalized with the creation of a Board of Stock and Produce Brokers, which became the Montréal Stock Exchange in 1872. Toronto brokers, too, formalized their trading; the Toronto Stock Exchange was created in 1852.

Building societies began appearing in 1846 and were often transformed into mortgage and loan companies to meet a growing demand for real estate financing. Canada's first trust company appeared in 1872 and Alphonse Desjardins launched his first *caisse populaire* (credit union) in 1900.

In 1997, chartered banks and other deposit-accepting institutions had financial assets totalling \$887 billion, a 52% increase from \$582 billion in 1993. These institutions play a critical role in assembling the savings of Canadians and channelling them to the entrepreneurs who transform them into factories, railways, buildings and stores. Today, the Canadian financial sector is one of the most efficient and stable in the world, not to



*Photo by O.S. Finnie, National Archives of Canada PA-100268*

**Union Bank of Canada, Fort Smith, Northwest Territories, 1921.**



## Café Stocks

*The first stock exchange in Canada took place in a coffee house. The Exchange Coffee House was a popular hang-out on Saint-Paul Street in Montréal. The year was 1832, nearly 40 years before Confederation.*

*When the "Exchange" was incorporated in 1874, it became the Montréal Stock Exchange and listed 63 issues with an average daily trading volume of 800 shares. Trading sessions lasted one and three-quarter hours during summer and two and a half hours in the winter.*

*Today, there are five stock exchanges across Canada. By far the largest is the Toronto Stock Exchange (TSE) with 1,300 listed companies. In 1997, some 85% of the value of stocks traded in Canada was exchanged through the TSE where trading reached a record \$423 billion. The TSE is the third largest stock exchange in North America and ranks among the top 10 in the world in terms of trading volume.*

mention one of the largest. The solidity of this sector has also become one of the traits ascribed to Canadians themselves.

The sector has been quick to adopt emerging technology. Today, Canadians can authorize direct deposit of paycheques to an account and purchase everything from groceries to telephone calls using debit, credit or smart cards. Bills can now be paid by telephone or by computer. Stocks can be traded at midnight on the Internet. It's possible to walk into a store in the Northwest Territories and use an automated banking machine (ABM) to retrieve cash from a bank account in Halifax or Montréal.

Canada's network of ABMs is so large that we now have the second highest concentration of ABMs per capita in the world. (Japan ranks first.) The use of debit cards, which allow users to directly debit their bank accounts when making purchases, has also shown extraordinary growth. In 1995, the number of debit card transactions increased more than 141% from 1994 (238 million items) with an estimated worth of \$12 billion.

Approximately 680,000 people work in the finance, insurance and real estate industries, representing about 6% of total employment in all industries. In 1997, these industries contributed \$110.2 billion to real GDP (at factor cost and in constant 1992 dollars), 16% of the total national input. Our institutions are international in scope. While 85% of jobs in chartered banks are located in Canada, close to 40% of the profits in 1996 were generated from international investments and activities.

Since 1961, the finance, insurance and real estate industries have grown at an average annual rate of 4.1% (real growth adjusted for inflation), slightly higher than the rate for the total economy of 3.7%. Growth rates, as with the economy as a whole, progressively slowed in the seventies, eighties and nineties. From 1991 to 1996, real growth in these industries was 2.2%, equal to that of the total economy over the same period.

## THE FOUR PILLARS

Historically, we have viewed the financial sector in terms of four “pillars”: banks, trust companies, insurance companies and investment companies. Until recently, each pillar had a distinct role and functions were separated by regulation at both the federal and provincial levels.

But the financial services industry is now in a period of adjustment as the four pillars have entered into direct competition with one another. For example, in 1992, Canada's Bank Act changed to allow banks ownership of trust and insurance companies. A series of acquisitions and mergers followed which allowed banks to provide one-stop services for consumers: not just banking but stock market advice, insurance and financial planning.

Canada's financial institutions, including banks, credit unions, trust companies and brokerage houses, together play the role of intermediaries in financial transactions involving cash or financial products. Their primary role is to provide all manner of financial and investment services, from home mortgages to raising of funds for large-scale projects through to the issue of stocks and bonds. They also store cash and securities for safekeeping and take on fiduciary responsibilities, such as administering wills and estates, pension plans and trust funds.

But we are no longer dealing with an essentially Canadian industry. Around the globe, the pressure to grow larger has led to consolidations and mergers. Money now moves from country to country with incredible speed. What happens in Europe or Asia can have an immediate impact on stock markets in Canada. Banks are forming alliances with each other and with high tech companies to spread the risk and costs of investing in new technology. “Is my competitor 10 years from now Microsoft Corp. or Royal Bank?” a Canadian banker ponders, and with good reason.

*The Vancouver Stock Exchange is Canada's second largest exchange with 7.1 billion shares worth \$8.7 billion traded in 1997. The Vancouver exchange is known internationally as a venture capital marketplace specializing in raising capital for small- and medium-sized companies.*

*The Montréal exchange maintains an important niche as Canada's capital of derivative products, which include futures and options contracts. In 1997, Montréal had more than 570 listed companies—companies representing more than \$638 billion in market capitalization.*

*The Alberta Stock Exchange was founded in 1914, almost exclusively on trade of oil stocks. The Winnipeg Stock Exchange was established in 1903 and developed mainly as a regional exchange. Today, both exchanges provide venture capital for emerging businesses.*

There is, additionally, a worldwide trend to mergers. In 1996, the merger of the Bank of Tokyo and Mitsubishi Bank in Japan created the world's largest bank with close to \$1.2 trillion in assets. At that time, the combined assets of Canada's six largest banks were just over \$800 billion. In 1996, there were no longer any Canadian banks among the world's 50 biggest banks; in 1984, there were four.

## Banks

"When I go into a bank, I get rattled," Stephen Leacock wrote in 1910. "The clerks rattle me; the wickets rattle me; the sight of money rattles me; everything rattles me." Not surprising that Leacock, the great Canadian humorist, would take aim at the banks; even then, they were powerful institutions, to be found front and centre on the main streets of most small towns across Canada. For decades, getting to the bank by 3 p.m. closing time was a shared Canadian experience.

When money and the financial sector are mentioned, most Canadians think first of the large chartered banks. The Big Six—the Bank of Montréal, the Bank of Nova Scotia, the Canadian Imperial Bank of Commerce, the National Bank of Canada, the Toronto-Dominion Bank and the Royal Bank of Canada—control around 90% of all banking assets. At the beginning of 1997, there were, in fact, nine domestic banks and 41 foreign banks operating in Canada.

In the 1990s, soaring bank profits brought media attention and criticism that profits were too large. "Canadians do not greatly love their banks. The immensity of these institutions, not to mention their vast profits, makes people suspicious," the British weekly *The Economist* observed in 1997 as the Big Six chartered banks reported collective earnings of \$7.5 billion. This large number reflects the reality that financial services is a large and important sector and includes Canada's most powerful businesses.

Today, with a network of more than 8,000 branches in Canada as well as a strong presence in cyberspace, chartered banks are some of the biggest businesses in Canada. Individuals also play a role in this world of high finance: one of every two working Canadians owns bank shares either directly or through mutual funds, pension funds or retirement savings.

Banking is a high-volume, low-margin industry. Banks make money by putting through large numbers of transactions. (Every working day, the banks clear almost 15 million items, including paycheques, Canada Savings Bonds, money orders and traveller's cheques.) Although banks are profitable, when measured against their assets in 1995, they earned just \$0.67 in after-tax profit for every \$100 in assets, including loans. The two banks with billion-dollar profits in 1995 ranked only 195th and 284th among the top 1,000 Canadian public companies in terms of return on common equity. As well, some of those profits were the result of newly acquired brokerage firms and an increase in international investments.

## Retail Banking

Our financial institutions provide Canadian families with a range of financial services. Retail banking (personal accounts and services to individuals) makes up the largest category of bank services. Chartered banks, with their extensive network of branches, dominate the market for consumer credit other than mortgages, holding 69% of all consumer loans. Credit unions hold another 11%; trust and mortgage loan companies, 9%; and life insurance companies, 3%. In 1997, those loans totalled \$135 billion.

Over 600 financial institutions in Canada issue VISA and MasterCard credit cards. In 1996, there were over 30 million such cards in circulation, with outstanding balances totalling close to \$19 billion. The average credit card interest rate of 17.59% in 1996 was lower than that of the United Kingdom (21.90%) and close to the average rate in the United States (17.48%). Nearly half of Canadians pay off credit card balances early to



avoid incurring interest charges. Approximately 78,000 cards were used fraudulently in 1996, with losses totalling \$83.6 million.

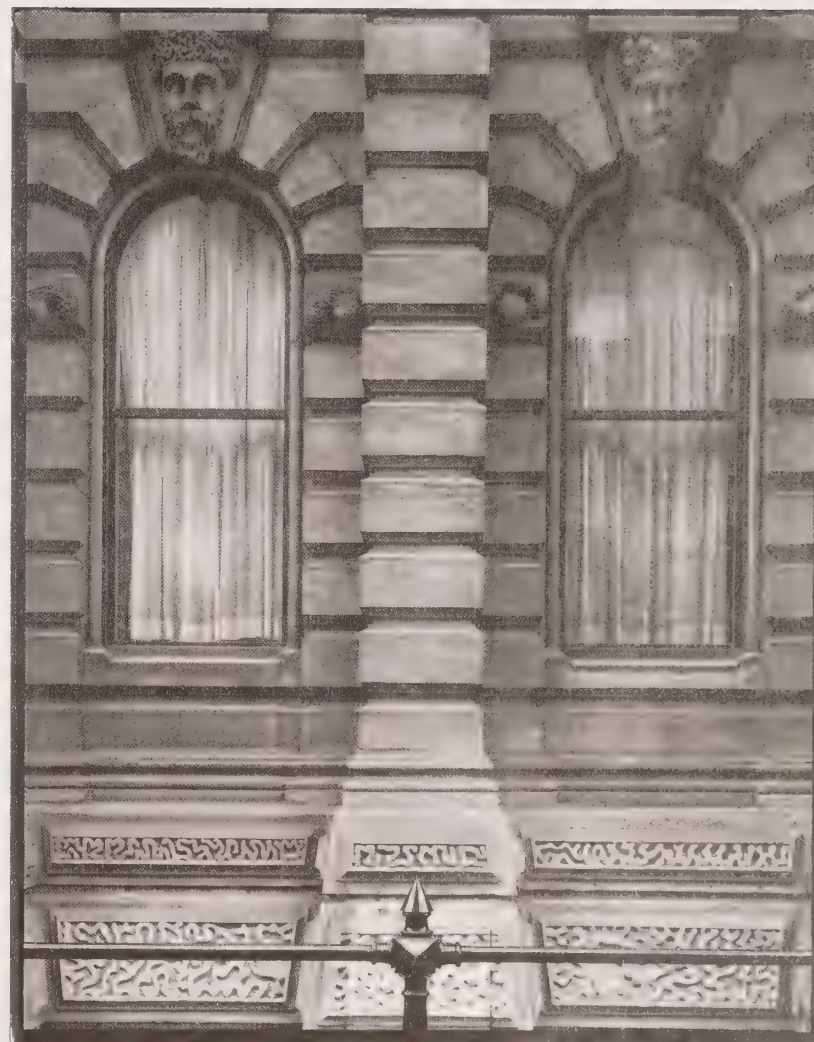
Smart cards have also arrived. Similar to credit cards, they also feature an embedded microchip that allows them to be loaded with money, so they're just like cash. These electronic cash cards can speed up transactions and may help reduce fraud by offering special electronic security and privacy protection.

## Business

Labour force shifts and corporate downsizing have led many Canadians to embrace, reluctantly or not, entrepreneurship and self-employment. Small- and medium-sized businesses now constitute 95% of the banks' commercial customers. Many financial institutions have responded to the shift by offering new products and services to small businesses and agricultural clients: bookkeeping services; creditor life insurance, investment and cash management services; and venture capital capabilities.

In 1996, the Big Six banks and the Hongkong Bank of Canada had more than \$63 billion in small-business credit authorized, of which about \$43 billion had been used. The average outstanding loan amount per customer was \$62,561.

Financial institutions play a critical role in channelling money to businesses. In 1997, total business credit rose to \$602 billion, including \$225 billion in short-term credit and \$377 billion in long-term. Together, the chartered banks had loans totalling \$113 billion to business and corporate clients. Finance companies had \$12 billion in loans and other institutions had \$16 billion.



Molson's Bank, Montréal.

Photo by Robert Bourdeau



Since the mid-1990s, the Canadian television drama "Traders" has chronicled the dramatic global deal-making of a group of Toronto-based investment bankers. In this case, television reflects real life as the Canadian financial sector also seeks profits in faraway places. Canadian banks have almost 300 branches in nearly 60 countries. In 1996, they accounted for close to 40% of the major banks' revenue.

In 1997, the Bank of Montréal opened its first branch in China and held its board of directors meeting in Beijing, the first ever to be held outside North America in its 180-year history. The Bank of Nova Scotia has staked out territory in Latin America. The Toronto-Dominion Bank has

reached an agreement to open branches in India. Through international agreements, Canadians have access to 500,000 ABMs in many countries around the world.

The entry of foreign institutions into Canada is an issue that has become more complex because of technology. Banks can now establish themselves—electronically, by direct mail or telemarketing—without having to actually establish a physical presence in Canada.

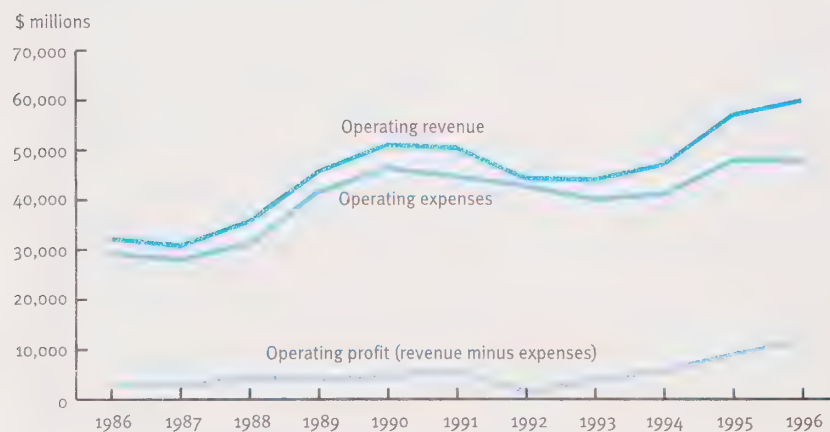
## Credit Unions

The big banks seem to have emerged as winners in the 1990s, but Canadians have many other choices when it comes to banking or finding loans. Financial co-operatives, like credit unions and the *caisse populaires*, are small but potent forces mostly in the area of household credit. Credit unions are co-operative financial institutions that serve their members only. They date back to 1900, when Alphonse Desjardins founded the first co-operative *caisse populaire* in Quebec.

At the end of 1997, Canada's local credit unions and *caisse populaires* had total assets of \$135 billion, an increase from \$113 billion in 1993. Between 1993 and 1997, annual operating profits of credit unions remained stable at \$1.3 billion. However, the number of employees stood at 57,000 in 1997, a drop from a high of 64,000 in 1991.

A number of other enterprises provide credit and financial services to both consumers and business. These include consumer loan companies, sales finance companies, credit card companies, factoring companies (which buy accounts receivable from other companies for cash and collect these accounts from the debtors), financial leasing companies and venture capital companies. Collectively, these firms held assets totalling \$95 billion at the end of 1997.

Profits of chartered banks and other deposit-accepting intermediaries  
(excludes credit unions and trust companies)



Source: Statistics Canada, CANSIM matrix 3968.

## Trust Companies

Deregulation of the industry and the business cycles of the 1980s and 1990s have changed the face of the financial sector. In 1992, there were 142 banks and trust companies insured by the Canada Deposit Insurance Corporation; in 1996, there were just 110. Trust companies are still associated with the traditional areas of finance: deposit and loan services, retail mortgages and fiduciary business. However, trust companies now encounter competition from banks for mortgages and consumer loan business and have lost ground, largely because of major losses in the commercial real estate market.

A host of companies, including Royal Trust Company, General Trust Company, Montréal Trust Company, and Victoria and Grey Mortgage Company, have either merged or been acquired by other financial institutions. Assets held by trust companies dropped from \$84 billion in 1993 to \$54 billion in 1997, a drop of 57%. During that same period, however, the level of operating profit increased dramatically from \$37 million (1993) to \$1.2 billion (1997).

## Savings

Home ownership, life insurance and bank savings have traditionally been considered the principal means to a secure future. In the 1990s, however, many Canadians have diversified their savings portfolios using such vehicles as mutual funds.

Since a large proportion of the Canadian population will be seniors in the not-too-distant future, helping people plan for retirement is an expanding part of business in the financial services sector. A major element in planning has revolved around Registered Retirement Savings Plans (RRSPs), which allow Canadians to defer taxes while saving for retirement. Although this type of savings was introduced in 1957, interest in RRSPs

didn't spark until the mid-1980s when more people began working for themselves and concern grew that government pensions might not be adequate. Aggressive advertising campaigns of financial institutions have also attracted RRSP investors.

The likelihood of contributing to an RRSP is closely aligned with income level. Of those earning \$50,000 or more, 80% bought an RRSP every year between 1991 and 1995. In the same period, only about one-third of Canadians with incomes between \$20,000 and \$30,000 made a yearly RRSP contribution.

## Bonds

For those who are shy about taking risks, bonds and government-issued treasury bills (T-bills) can provide a relatively safe guaranteed rate of return. Financial institutions, private corporations, Crown corporations, in addition to all three levels of government, issue bonds for the purpose of raising money. Canada Savings Bonds (CSBs) have been issued each fall since 1946. Surveys show that at least one in four households owns CSBs.

Recently, net federal government borrowing on the bond and treasury bill markets fell to levels not seen since the 1970s. In 1997, as a result of its efforts to reduce the deficit, the federal government retired \$25 billion in T-bills. At the same time, it borrowed \$18 billion on the bond market. For the first time in 27 years, on a net basis, the government was actually in a position to pay down marketable debt.

## Stocks

The low interest rates of the 1990s have triggered an unprecedented boom in mutual funds as Canadians have turned to professionally managed money funds with hopes of higher rates of return. Mutual funds allow investors to pool money to invest savings. Again, banks seemed to have





*Photo by William DeKay*

**Sam the dog, at Blinn's General Store in Stanbridge East, Quebec.**

benefited from the shift to mutual funds. In 1987, when Canadians invested \$20 billion in mutual funds, the banks managed 8.2% of this invested money. By 1995, the mutual fund pool had grown to \$146 billion and the banks' share of this had grown to 23.9%.

Interest in the stock market has also increased. In 1996 about 37% of Canadians had some money in the stock market. In 1997, the Bre-X Minerals scandal served as a reminder of the volatility of financial markets. Fuelled by reports of huge gold deposits in Indonesia, stock in the Calgary-based exploration company shot upwards and then crashed just as spectacularly. Some Canadians found their huge paper profits had disappeared overnight. Others made a quick fortune.

In Canada, stock exchanges are located in Montréal, Toronto, Winnipeg, Calgary and Vancouver. In 1997, the Toronto Stock Exchange (TSE) accounted for nearly 85% of the value of shares traded on Canadian exchanges and ranked 11th among world stock exchanges, according to market capitalization. In 1996, the value of shares traded increased 45% to a record \$301 billion.

## Insurance

Canadians buy insurance to protect their assets. Premiums paid by many are used to protect the few who must deal with misfortune. Like other financial services, insurance is in transition and under pressure from competition and consolidation. Canadians and their businesses generally buy two types of insurance: life insurance and property and casualty insurance.

Life insurance includes individual and group pensions, and accident and health insurance. In 1997, life insurers had assets of \$177 billion. The number of life insurance policies sold has declined from a peak of more than 1 million policies in 1988 to 798,277 in 1996. Benefits paid by life insurers amounted to \$22.7 billion in 1996, up 43% from the 1992 figure of

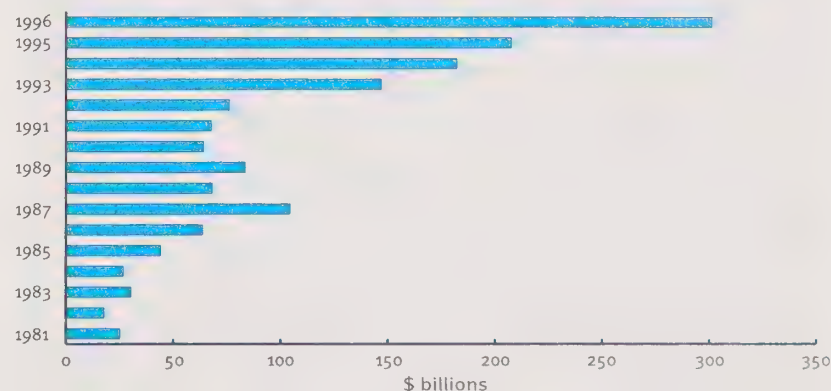
\$15.8 billion. Of total payments, 75% were annuities and 25% payments under life insurance policies.

The major types of property and casualty insurance are automobile insurance, property insurance and liability insurance. In 1997, property and casualty insurers had assets of \$53 billion. Operating profits for property and casualty insurers have been on an upward trend since 1980, reaching \$2.8 billion in 1997.

## Real Estate

In the 1990s, a downward trend in mortgage rates made housing more affordable for many Canadians. In 1996, a 5% down payment on a starter home ranged from an average of \$8,253 in Victoria to \$3,156 in

Value of shares traded on the Toronto Stock Exchange



Source: Statistics Canada, Catalogue no. 11-210-XPB.



Charlottetown. In 1996, the Multiple Listing Service (MLS), an industry-sponsored co-operative real estate listing system, moved nearly 400,000 properties worth more than \$54 billion. While prices have remained fairly constant, MLS sales have increased 26%.

The average sale price of \$151,645 was a nominal 0.7% increase over the previous year.

Communities such as Elliot Lake in Northern Ontario have enjoyed a



Nelly Hong, Cluny, Alberta, 1998.

resurgence by using inexpensive housing to lure recent retirees away from the big cities. Other areas, like Cape Breton, have launched campaigns to bring back those who went “down the road” to seek work in Ontario or Alberta in earlier years.

## THE BANK OF CANADA

Several institutions play key roles in protecting Canadian investment and money. Together, they ensure that the Canadian financial sector remains strong and viable.

The Bank of Canada is at the heart of the Canadian financial system. The Bank exists “to regulate credit and currency in the best interests of the economic life of the nation.” It is responsible for the conduct of monetary policy in Canada; it issues bank notes; it provides the means of final settlement of cheques and other payment items cleared daily through financial institutions; and it acts as banker and fiscal agent for the Government of Canada.

In carrying out monetary policy, the Bank seeks to provide confidence in the value of Canadian money by resisting inflation. In February 1991, the Government and the Bank adopted an explicit target range for inflation. For the period 1995 to 1998, that range was set at 1% to 3%.

The Bank of Canada implements monetary policy through its influence on the level of interest rates and on the exchange rate for the Canadian dollar. As a major trading nation fairly open to world capital markets, Canada's interest rates and dollar value are linked to events in other countries, particularly events in the United States, our main trading partner.

The best-known product of the Bank of Canada is its bank notes. The Bank issues bank notes, promotes public awareness of security features on bank notes and conducts education and research to combat counterfeiting.

The most visible anti-counterfeiting measure is the Optical Security Device, a reflective rectangle on twenty-dollar, fifty-dollar, one hundred-dollar and one thousand-dollar bills that changes colour from gold to green when tilted against light.

A number of other institutions play important roles in safeguarding the financial sector. The Canada Deposit Insurance Corporation (CDIC) is an insurer and protects customers if an institution fails, making sure that the first \$60,000 of most accounts is not lost to the deposit holder. Premiums collected from financial institutions pay for the cost of the insurance.

The Office of the Superintendent of Financial Institutions (OSFI) is the primary regulator and supervisor of federal financial institutions and pension plans. Its mission is to safeguard policyholders, depositors and pension plan members from undue loss.

The securities industry is overseen by the securities commission of the province in which securities are issued. Canada's five stock exchanges and the Investment Dealers Association of Canada are private sector businesses that act as self-regulating organizations.

## COMMUNITY, BUSINESS AND PERSONAL SERVICES

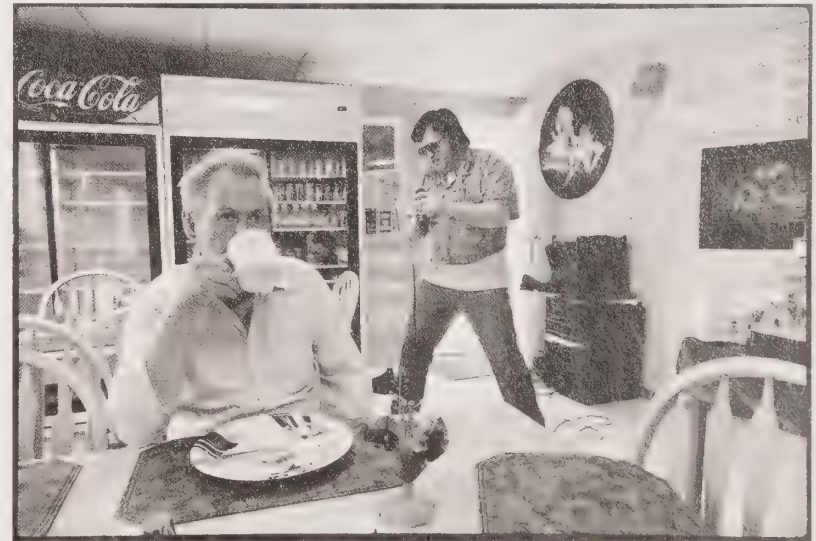
Community, business and personal services have contributed to the astonishing growth that has occurred in the services sector over the last two decades. Between 1986 and 1996, these services grew, in real terms, 23.4%.

### Business Services

Business services are services provided to the business community rather than to the general public. These include computer services, accounting, architectural and engineering services, advertising, legal and consulting

services. Over the past two decades, growth in employment in the business services sector has significantly outpaced growth in other parts of the economy. In 1997, business services contributed \$38.8 billion to the GDP, 5.6% of the total GDP for all industries. From 1986 to 1996, the business services industries' contribution to the GDP grew at an average annual rate of 4.7%, compared with 2.0% for the total economy.

Generally, employees in business services are better educated and better paid than the average worker. Employment is heavily concentrated in urban centres. Between 1976 and 1994, self-employment in business services grew considerably, so that three in 10 people in the business sector were self-employed, a higher proportion than for the economy as a whole. Women have played an important role in the growth of business services. In this same period, the number of women providing business services tripled.



Tagish Elvis, Watson Lake, Yukon.

Photo by David Truttles



## *The Art of Money*

*In 1997, when Newfoundland celebrated the 500th anniversary of the arrival of John Cabot on Newfoundland's shores, the Royal Canadian Mint produced a 1997 silver ten-cent coin depicting Cabot's ship, the Matthew.*

*Each year, the Royal Canadian Mint produces more than one billion coins and often they tell much about Canadian lives and heritage, linking our art and history to . . . our money.*

*In 1997, to celebrate Canada's win in the 1972 Canada-USSR hockey series, the Mint produced a proof silver dollar. After all, it had now been 25 years since we had beat the Russians, a memorable victory in the nation's history.*

*To commemorate the early days of wildlife on the Canadian prairies, the Mint produced a four-piece platinum set of the wood bison that also serves as recognition of the modern-day fight to save this creature from extinction.*

Employment is up in computer and related services. Between 1986 and 1996, employment in this area more than doubled from 40,000 employees to 83,700. Federal, provincial and municipal governments are prime customers for computer services. In 1995, they bought 17% of computer and related services. The finance and insurance sector followed closely with 16%.

In 1996, employees in computer and related services earned average weekly salaries of \$830, a somewhat higher wage than the \$652 average for all business services.

## **Accommodation and Food Services**

Canada's hotels, motels, restaurants and taverns, which make up the accommodation and food services industry, have experienced slow growth in recent years and were particularly hit by the recession. In 1997, the accommodation and food services industries contributed \$18.4 billion to GDP, 2.6% of GDP for all industries. From 1986 to 1996, the accommodation and food services industries grew slowly at an average annual rate of 0.4%, compared with 2.0% for the economy as a whole.

Employment figures tell a similar story. According to Statistics Canada's payroll survey, industry employment peaked at 828,000 in 1989, fell to 737,000 in 1992, and rose again to 800,500 employees by 1996. Average weekly earnings in the accommodation and food services industries were the lowest of any industrial group (\$237 in 1996); however, many workers in these industries receive a significant portion of their income through gratuities, which are not recorded in payroll surveys.

## Tourism

In 1996, Canada was one of the top 10 tourism destinations in the world. Visits from international travellers to Canada each year fluctuated between 34 million and 42 million during the period 1980 to 1995. In 1997, that number reached just over 45 million, the highest level in 25 years.

The relatively open border between the United States and Canada has historically meant extensive travel between the two countries. In 1996, nearly 13 million visitors came from the United States and stayed more than one night in Canada. Among Canada's major overseas markets, the United Kingdom, Japan, France and Germany recorded strong growth in tourist visits.

Domestic travel declined (from a high of 158 million trips in 1994 to 138 million in 1996). Of those taken in 1996, a full 37% were visits to friends and relatives, 36% were pleasure trips, 14% were business trips and 13% were for personal reasons. Canadians were less inclined to stay the night. In 1988, same-day trips represented 40% of all domestic trips, while by 1996, day-long excursions had grown to 48% of all such trips.

Trends in travel are echoed in the increase in employment in accommodation.

*To mark Alexander Graham Bell's invention of the telephone and its impact on world communications, the Mint produced a 1997 14-karat one hundred-dollar gold coin.*

*Coins minted in Canada have an international reputation for quality and are coveted the world over. In the past 25 years, the Mint has produced more than 13 billion coins, both for collectors and for general circulation, for more than 60 countries around the world.*

*When Hong Kong returned to the People's Republic of China in 1997, the Royal Canadian Mint produced one thousand-dollar gold coins to mark the occasion—97,000 of them, in 22-karat. The first coin to be issued by the Hong Kong Monetary Authority was “made in Canada.”*



## *L e g e n d s   o f   F a l l s*

*There is a South Pacific legend that tells of the first bungee jump on record. The story goes that a young woman, seeking to escape an abusive husband, climbed a banyan tree and with her husband in hot pursuit, tied lianas vines around her ankles. When he tried to grab her, she jumped. He followed and plunged to his death.*

*Macabre as it may seem, the idea caught on, and bungee jumping has become a leisure pursuit throughout the world (and a relative newcomer to the services industry). There are an estimated 150 bungee sites worldwide and some 500,000 take the plunge annually. In Canada, experts*

*claim 15,000 or more people bungee jump every year.*

*Other services that can up the pulse include parachuting, car racing and mountain climbing.*

*Mountaineering may come as no surprise, given the number of peaks in Canada. This pursuit began in earnest in the 1880s, when the newly-minted Canadian Pacific Railway opened up the Selkirk and Rocky Mountain ranges. In 1925, Albert MacCarthy led a team of climbers up the 6,000 metres of Mount Logan, Canada's highest elevation. In 1982, Laurie Kreslet made it to the top of Everest,*

*which is the highest mountain on the planet.*

*If going up does not provide a thrill, moving along terra firma at great speeds is always an option. Car racing became quite popular in Canada following the Second World War. There were two important reasons for this. Many servicemen returned with sports cars purchased in Europe, and there were many abandoned airfields that could be used for racing.*

*Drawing on this legacy, Canada can claim two of the world's greatest drivers, Gilles Villeneuve, who won six world championship races before his death in*

*1982, and son Jacques. In fact, Jacques Villeneuve became the Formula One World champion in 1997.*

*Another sport that beckons Canadians has to do with the action of falling... at great speeds and to great depths. Parachuting has been around for about 200 years, since the first successful descent took place in Paris in 1797. In 1919, in the first such event in Canada, Frank Ellis jumped from a Jenny aircraft on a fly over Lake Erie.*

*Since 1960, the Canadian National Parachuting team has ranked among the top 10 countries in international competition, and was especially dominant in the 1970s. While an estimated 10,000 people make the jump for the first time each year across Canada, interestingly less than 2% return to try a second time.*

*Canadian interest in surfing the sky in a hang glider (which is the closest one can come to pretending one is a bird while still being respected by the general population)*

*peaked 15 to 20 years ago, but interest in gliding increased in the 1990s with a growth in commercial towing operations. There are an estimated 2,000 active Canadian hang gliders and paragliders in Canada.*

*A new cousin to hang gliding is hang glide skiing. Apparently all one needs, other than a glider, skis and a strong heart, is snow. In Canada, no problem.*

## Haute Cuisine

*In Canada, dining out is a culinary adventure featuring the exotic and the rare, or it's a fast-food, quick-fix, stand-at-the-counter affair. So what do we eat when we're out? The range can be from mignardises to poutine or from venison to the lowly hamburger. And where do we eat? Venues vary from Rideau Hall to Joe's Fast Food Emporium.*

*In 1997, Canada's Governor General invited literally thousands over for a bite: everything from cookies baked on site for the annual Garden Party to formal dinners held for visiting heads of state. Rideau Hall dinners can be a study in Canadiana.*

*Here's a menu from a 1997 state dinner:*

*Crab-stuffed Filet of Sole with Lobster  
Medallion of Venison with Mango  
"Les Halles" Salad  
Rideau Hall Fantasy  
Mignardises*

## Personal and Household Services

Barber and beauty shops, laundries and cleaners, shoe repair shops and funeral homes are the principal sites of the personal and household services sector. Personal and household services suffered during the recession of 1992, as many people cut back on non-essential spending. Together, these service industries contributed \$5.5 billion to the GDP in 1997, only 0.7% of the total GDP for all industries. Of 111,000 industry workers in 1996, close to 45% were employed in barber and beauty shops.

The funeral services industry escaped the slump, and in fact, between 1986 and 1996, employment in this industry more than doubled—from 5,000 employees to 13,600 employees. Weekly wages doubled as well (almost)—from \$275 in 1985 to \$502 in 1996. As well as a trend to consolidation in the industry and to pre-arranged funerals, new businesses were launched in the 1990s to sell caskets from showrooms, a sign that baby boomers may depart this earth in quite a different style than did their parents.



## Recreational and Other Services

The amusement and recreational services industries include motion picture production and exhibition, audio and video production, performing arts companies (and production companies), professional sports, sports and recreation clubs and services. These services also include gambling operations, such as casinos, which have sprung up in many parts of Canada during the 1990s. Other services include those dealing with photography, travel, cars and equipment. These industries grew with vigour from 1986 to 1996, with an average 3.5% annual increase in their contribution to GDP. In 1997, these service industries contributed \$7.2 billion to the GDP, or 1% of the total for all industries.

In 1996, about 194,000 workers were employed in these industries. The amusement and recreational services industries are not high-wage industries. Workers received average weekly wages of \$390 in 1996, well below the average for all industries that year of \$572.

## Exporting Services

While Canada has typically maintained a surplus on its trade in goods, there has also typically been a deficit on its trade in services. That is, since the 1950s, we have purchased more services from other countries than we have sold to them. However, since 1994, our exports have grown at a faster rate than our imports, so the gap between exports and imports has narrowed.

*For most of us, eating out is a more subdued affair. In 1996, Canadians dined out an average of 4.7 times a week. French fries were our most coveted menu item, followed by salads, pizza, baked goods, hamburgers, sandwiches and desserts.*

*A star Canadian dish on the fast-food track is poutine: it consists of French fries, melted cheese curds and gravy. Less sought after are mignardises, which roughly translated would be “delicate biscuits and chocolates.”*



*Photo by Steve Evans (further details, see Appendix C)*

**Gus Risto, woodworker, sits surrounded by his works.**

Between 1993 and 1997, the value of Canadian exports of services increased from \$28.5 billion to \$41.3 billion, a growth of 45%. Our payments for imports of services increased as well, from \$42 billion to \$50 billion, an increase of 20%. The deficit—the difference between imports and exports—was \$8.8 billion. This followed a \$9.9 billion deficit in 1996, the first time in the decade that the deficit had fallen below \$10 billion.

The prime contributor to the services deficit was related to transportation services. In 1997, Canada paid \$12.4 billion for transportation services and received \$8.3 billion in payments. The \$4 billion deficit was created largely by payments of freight costs on Canadian imports sent by ocean and Canadian travellers using foreign airlines.

Canada has also continued to have a deficit in travel services. In 1997, foreign travel receipts totalled \$12.4 billion, while Canadians spent \$15.6 billion abroad. The travel deficit of \$3 billion was a significant reduction from the \$5.7 billion deficit in 1993.

Other commercial services (with a small component of government services) are the largest as well as the fastest growing part of international transactions in services. These services include financial services, architectural and engineering services, life insurance, royalties and licence fees, research and development, computer and information services and non-financial commissions.

## SOURCES

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Canada Deposit Insurance Corporation  
Canadian Bankers Association  
The Canadian Securities Institute  
Department of Finance Canada  
Industry Canada  
Investment Dealers Association of Canada  
Office of the Superintendent of Financial Institutions Canada  
Royal Canadian Mint  
Statistics Canada

### FOR FURTHER READING

Selected publications from Statistics Canada

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- **Research and Development in a Service Economy.** Analytical paper series. 1997. 63F0002XPB
- **Public Sector Finance.** Annual. 68-212
- **Annual Estimates of Employment, Earnings and Hours.** Annual. 72F0002
- **Retirement Savings through RRP's and RRSP's.** Annual. 74F0002XPB

Selected publications from other sources

- **Annual Report.** Canada Deposit Insurance Corporation. 1996.



## Finance and Services

### Legend

– nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 13.1 Gross Domestic Product at Factor Cost, Finance and Services

	1992	1993	1994	1995	1996	1997
	\$ constant 1992 (millions)					
<b>All industries</b>	<b>604,275</b>	<b>619,194</b>	<b>643,063</b>	<b>655,088</b>	<b>665,277</b>	<b>691,272</b>
Finance, insurance and real estate industries	97,577	100,979	104,074	104,912	107,453	110,428
Finance and insurance industries	29,916	31,808	33,533	33,331	34,329	36,028
Deposit-accepting intermediary industries	17,247	18,122	18,864	19,154	19,985	21,247
Other financial intermediary industries	5,015	5,768	6,581	6,138	6,236	6,657
Insurance industries	7,654	7,918	8,088	8,039	8,108	8,124
Real estate operator and insurance agent industries	67,661	69,171	70,541	71,581	73,124	74,400
Real estate industries (including owner-occupied dwellings)	62,929	64,538	65,927	67,119	68,079	69,305
Insurance and real estate agent industries	4,732	4,633	4,614	4,462	5,045	5,095
Business service industries	27,782	29,288	30,782	33,460	35,750	38,826
Miscellaneous business service industries	8,747	9,053	9,483	10,388	10,962	11,760
Computer and related services	3,425	4,544	5,404	6,421	7,146	8,439
Accounting and legal services	7,414	7,227	6,928	6,908	7,128	7,194
Advertising services	1,574	1,634	1,558	1,709	1,902	2,123
Architectural, engineering, scientific and technical services	6,622	6,830	7,409	8,034	8,612	9,310
Government service industries	45,409	44,913	44,358	43,292	41,637	40,559
Federal government service industries	20,348	20,128	19,978	19,289	18,475	17,496
Provincial and territorial government service industries	13,473	13,264	12,959	12,660	12,015	11,822
Local government service industries	11,588	11,521	11,421	11,343	11,147	11,241
Educational service industries	39,582	40,411	40,414	40,474	40,465	40,222
Health and social service industries	47,138	47,338	47,431	48,422	48,171	48,515
Hospitals	20,019	19,978	19,609	19,198	18,758	18,252
Other health and social service industries	27,119	27,360	27,822	29,224	29,413	30,263
Accommodation, food and beverage service industries	15,962	16,455	17,346	17,507	17,599	18,405
Accommodation service industries	5,364	5,471	5,782	5,884	5,829	5,988
Food and beverage service industries	10,598	10,984	11,564	11,623	11,770	12,417
Other service industries	25,020	25,690	26,236	26,993	27,341	27,991
Amusement and recreational service industries	5,987	6,116	6,373	6,677	6,908	7,226
Personal and household service industries	5,268	5,386	5,476	5,486	5,496	5,500
Membership organizations and other service industries	13,765	14,188	14,387	14,830	14,937	15,265

Source: Statistics Canada, CANSIM, matrix 4677.

13.2 Private and Public Capital Expenditures, Finance and Services<sup>1</sup>

	1991	1992	1993	1994	1995	1996	1997	1998
	\$ millions							
<b>Private and public investment in Canada</b>	<b>128,010.0</b>	<b>122,188.8</b>	<b>121,253.9</b>	<b>130,131.2</b>	<b>127,802.8</b>	<b>135,271.2</b>	<b>151,792.0</b>	<b>161,161.8</b>
Finance and insurance industries	5,154.8	5,002.2	5,695.3	7,054.8	8,455.0	9,772.8	13,908.7	15,669.0
Deposit-accepting intermediaries	1,527.6	1,251.1	1,383.0	1,309.0	1,617.5	1,346.8	2,022.3	2,392.1
Consumer and business financing	3,254.9	3,392.9	3,998.4	5,508.6	6,041.2	7,457.8	11,085.9	12,432.5
Investment intermediary industries	—	—	—	—	137.6	224.6	235.1	238.2
Insurance industries	372.3	358.2	313.9	237.2	445.2	445.7	346.6	409.6
Other financial intermediary industries	—	—	—	—	213.5	297.8	218.8	196.7
	%							
Investment in finance and investment industries as a percentage of total investment	4.0	4.1	4.7	5.4	6.6	7.2	9.2	9.7

1. The data for 1998 are forecasted intentions.

Source: Statistics Canada, CANSIM, matrix 3108.

## 13.3 Employment, Finance and Services, Canada, the Provinces and Territories, 1997

	Canada	Nfld	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Y. T.	N. W. T.
	Employees <sup>1</sup> (thousands)												
<b>All industries<sup>2</sup></b>	<b>11,299.0</b>	<b>144.9</b>	<b>45.8</b>	<b>314.9</b>	<b>253.1</b>	<b>2,700.6</b>	<b>4,422.8</b>	<b>425.0</b>	<b>335.3</b>	<b>1,162.2</b>	<b>1,454.9</b>	<b>14.2</b>	<b>25.3</b>
<b>Goods-producing industries</b>	<b>2,606.4</b>	<b>25.7</b>	<b>8.8</b>	<b>59.3</b>	<b>55.7</b>	<b>664.7</b>	<b>1,093.1</b>	<b>82.5</b>	<b>54.8</b>	<b>263.4</b>	<b>291.8</b>	<b>2.2</b>	<b>4.3</b>
Logging and forestry	66.9	1.9	8.8	2.4	4.9	7.3	8.1	0.6	1.1	2.3	28.8	x	x
Mining, quarrying and oil wells	143.4	2.8	x	3.1	3.2	15.5	21.2	3.9	10.1	68.1	12.7	x	1.9
Manufacturing	1,800.4	12.8	5.6	36.9	32.0	503.9	850.4	57.5	25.2	109.8	165.8	x	x
Construction	472.7	5.2	2.8	14.0	11.9	100.0	162.1	14.3	14.5	71.4	73.9	0.8	1.6
<b>Service-producing industries</b>	<b>8,597.9</b>	<b>118.1</b>	<b>36.7</b>	<b>254.3</b>	<b>195.3</b>	<b>2,010.8</b>	<b>3,296.8</b>	<b>339.6</b>	<b>276.1</b>	<b>887.9</b>	<b>1,149.9</b>	<b>11.8</b>	<b>20.7</b>
Transportation, communications and other utilities	851.4	13.4	3.0	24.5	22.1	196.2	313.2	42.6	27.5	92.7	112.5	1.5	2.4
Trade	2,124.4	28.8	7.8	62.2	48.9	505.3	827.1	77.1	66.3	221.8	273.8	1.8	3.4
Finance, insurance, and real estate	704.2	6.9	2.1	17.0	12.3	154.5	310.3	26.4	23.1	61.1	89.1	0.5	1.0
Finance and insurance	507.8	5.2	1.8	11.8	8.6	113.2	227.1	19.5	17.5	41.5	61.0	x	x
Community, business and personal services	4,366.6	56.3	18.5	126.7	95.0	1,014.6	1,660.6	170.6	138.0	460.3	612.5	4.7	8.6
Business services	737.9	4.7	0.9	14.6	11.8	161.6	330.6	19.3	12.3	86.5	94.5	0.4	0.8
Educational and related services	923.5	15.1	4.4	30.4	21.9	226.4	331.7	38.5	32.3	90.1	128.5	1.1	3.0
Health and social services	1,207.7	20.5	5.7	39.9	32.5	302.8	434.7	60.0	48.0	106.3	154.1	0.9	2.3
Accommodation, food and beverage services	827.9	9.4	4.9	24.9	16.8	171.9	297.7	0.3	29.2	101.4	138.0	1.6	1.5
Miscellaneous services	669.7	6.7	2.5	16.9	12.1	151.9	266.0	22.3	16.2	75.9	97.4	0.7	1.1
Public administration	674.3	15.6	5.5	26.7	20.8	169.2	237.0	29.1	25.1	63.7	72.5	3.5	5.7

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrices 4285, 4299, 4313, 4327, 4341, 4355, 4369, 4383, 4397, 4411, 4425, 4439 and 4453.

## 13.4 Employment, Finance and Services

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>All industries<sup>2</sup></b>	<b>10,650.9</b>	<b>10,876.4</b>	<b>10,967.2</b>	<b>11,299.0</b>
<b>Finance, insurance, and real estate</b>	<b>670.5</b>	<b>670.0</b>	<b>679.9</b>	<b>704.2</b>
Finance and insurance	488.9	487.5	491.3	507.8
Deposit-accepting intermediaries	279.0	276.5	271.4	279.1
Banks	193.7	193.0	190.4	195.6
Trust companies	28.4	25.3	22.8	23.7
Deposit accepting mortgage companies	0.2	0.2	0.3	x
Credit unions	56.0	57.8	57.7	59.1
Consumer and business financing intermediaries	17.8	15.9	16.4	17.2
Investment intermediaries	60.5	65.2	70.9	75.3
Insurance (excluding agencies)	100.4	96.7	99.0	99.5
Other financial intermediaries	31.0	33.4	33.6	36.8
Real estate operators and insurance agencies	181.6	182.5	188.7	196.3
<b>Business services</b>	<b>587.0</b>	<b>631.5</b>	<b>683.8</b>	<b>737.9</b>
Employment agencies and personnel suppliers	69.0	79.4	92.3	103.4
Computer and related services	62.5	68.9	82.7	95.0
Accounting and bookkeeping services	56.8	57.6	58.8	58.9
Advertising services	24.3	31.2	37.0	42.3
Architecture, engineering and other scientific and technical	105.9	114.9	127.2	141.9
Offices of lawyers and notaries	60.0	54.1	57.9	56.1
Management consulting services	75.9	84.5	87.0	91.5
Other business services	132.7	141.0	140.8	148.8
<b>Educational and related services</b>	<b>937.1</b>	<b>937.3</b>	<b>935.2</b>	<b>923.5</b>
<b>Health and social services</b>	<b>1,169.0</b>	<b>1,212.4</b>	<b>1,199.4</b>	<b>1,207.7</b>
<b>Accommodation, food and beverage services</b>	<b>756.7</b>	<b>786.2</b>	<b>800.5</b>	<b>827.9</b>
Accommodation services	167.9	165.4	173.2	174.2
Food and beverage services	588.8	620.8	627.3	653.7
<b>Miscellaneous services</b>	<b>615.1</b>	<b>618.5</b>	<b>637.7</b>	<b>669.7</b>
Amusement and recreational services	183.1	187.8	193.8	205.2
Personal services (excluding private households)	108.5	110.2	111.3	111.1
Barber and beauty shops	50.0	50.9	50.2	52.6
Laundries and cleaners	28.9	28.6	28.8	29.7
Funeral services	10.2	12.2	13.6	12.1
Other personal services (excluding private households)	19.4	18.5	18.6	16.7
Membership organizations	101.7	99.4	105.6	117.5
Other services	221.9	221.1	227.0	235.9
Automobile and truck rental and leasing	104.3	99.6	99.9	100.8
Photographers	14.1	14.9	14.9	17.1
Services to buildings and dwellings	4.9	5.4	5.4	5.6
Travel services	68.4	70.0	77.4	81.8
Other services	30.1	31.1	29.5	30.5

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

2. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4285.



13.5 Earnings,<sup>1</sup> Finance and Services

	1994	1995	1996	1997
	Average weekly earnings <sup>2</sup> \$			
<b>All industries<sup>3</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>
<b>Finance, insurance, and real estate</b>	<b>644.23</b>	<b>658.48</b>	<b>704.59</b>	<b>742.17</b>
Finance and insurance	676.38	695.38	749.68	784.89
Deposit-accepting intermediaries	585.99	602.31	632.38	659.69
Banks	599.51	623.31	656.87	667.45
Trust companies	578.11	590.53	624.82	662.04
Deposit accepting mortgage companies	589.13	682.51	739.78	x
Credit unions	539.60	536.41	553.14	628.22
Consumer and business financing intermediaries	729.80	762.78	777.69	810.14
Investment intermediaries	684.00	737.98	798.83	786.36
Insurance (excluding agencies)	740.34	757.36	787.64	827.68
Other financial intermediaries	1,236.82	1,171.72	1,468.56	1,604.65
Real estate operators and insurance agencies	557.70	559.88	587.18	631.67
<b>Community, business and personal services</b>	<b>487.86</b>	<b>490.73</b>	<b>501.18</b>	<b>506.58</b>
<b>Business services</b>	<b>604.66</b>	<b>621.54</b>	<b>651.93</b>	<b>680.50</b>
Employment agencies and personnel suppliers	394.21	388.40	429.99	473.65
Computer and related services	795.61	800.95	829.90	888.17
Accounting and bookkeeping services	567.39	579.34	609.77	631.81
Advertising services	626.57	657.98	649.21	631.37
Architecture, engineering and other scientific and technical services	785.60	818.33	847.40	867.12
Offices of lawyers and notaries	613.45	618.91	657.58	675.19
Management consulting services	645.83	687.08	691.92	705.97
Other business services	464.09	475.66	507.55	533.25
<b>Educational and related services</b>	<b>671.84</b>	<b>669.68</b>	<b>671.64</b>	<b>668.38</b>
<b>Health and social services</b>	<b>504.28</b>	<b>502.98</b>	<b>509.81</b>	<b>517.52</b>
<b>Accommodation, food and beverage services</b>	<b>227.57</b>	<b>232.20</b>	<b>236.83</b>	<b>235.36</b>
Accommodation services	293.85	302.52	307.64	308.78
Food and beverage services	208.67	213.47	217.28	215.80

**13.5 Earnings,<sup>1</sup> Finance and Services (concluded)**

	1994	1995	1996	1997
	Average weekly earnings <sup>2</sup> \$			
<b>Miscellaneous services</b>	<b>385.11</b>	<b>390.60</b>	<b>405.17</b>	<b>407.35</b>
Amusement and recreational services	375.44	376.19	389.61	393.30
Personal services (excluding private households)	312.81	320.60	334.29	336.37
Barber and beauty shops	289.60	290.11	297.52	294.90
Laundries and cleaners	341.60	335.90	364.23	367.10
Funeral services	472.87	537.79	502.88	515.13
Other personal services (excluding private households)	246.08	237.32	263.50	282.96
Membership organizations	451.22	464.48	491.49	486.70
Other services	398.14	404.51	413.07	413.45
Automobile and truck rental and leasing	498.06	496.29	534.16	525.14
Photographers	338.54	355.83	378.28	392.75
Services to buildings and dwellings	300.35	314.99	315.51	323.32
Travel services	489.36	502.78	513.19	498.56
Other services	425.21	425.70	442.96	443.01

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T4 is not required.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, CANSIM, matrix 4288.

**13.6 Mortgages**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions										
<b>Total</b>	<b>155,328</b>	<b>181,273</b>	<b>209,143</b>	<b>238,960</b>	<b>258,568</b>	<b>281,655</b>	<b>303,935</b>	<b>324,118</b>	<b>336,228</b>	<b>349,931</b>	<b>366,108</b>
Chartered banks	54,988	68,434	81,705	96,503	107,682	121,107	142,553	164,940	177,079	191,341	213,346
Trust and mortgage loan companies	45,214	52,869	62,913	70,606	71,546	69,346	57,678	44,942	42,091	39,737	31,557
Credit unions and caisses populaires	22,607	25,994	28,216	30,655	33,959	38,593	41,909	44,413	46,169	48,231	50,651
Life insurance companies	12,309	12,894	13,621	16,001	17,592	19,279	19,835	20,654	21,181	21,725	21,743
Pension funds	6,781	7,275	7,578	7,864	7,926	7,693	8,073	8,186	8,007	7,724	8,014
Finance companies and other institutions	13,216	13,019	13,028	13,243	13,757	16,204	19,484	24,347	24,476	25,558	26,641
NHA mortgage-backed securities	213	789	2,083	4,089	6,106	9,434	14,403	16,637	17,225	15,614	14,157

Source: Statistics Canada, CANSIM, matrix 2570.

13.7 Chartered Banks<sup>1</sup>

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions										
<b>Operating revenue</b>	<b>30,820</b>	<b>35,709</b>	<b>45,661</b>	<b>51,031</b>	<b>50,417</b>	<b>44,291</b>	<b>43,993</b>	<b>46,917</b>	<b>56,843</b>	<b>59,694</b>	<b>61,112</b>
Sales of services	2,728	3,817	4,461	4,717	5,423	5,714	6,500	8,249	7,990	9,847	12,339
Interest	26,644	30,675	39,141	44,063	42,102	36,241	34,276	36,775	46,828	47,241	44,496
Dividends	742	491	710	663	691	489	416	661	640	963	740
Gains on sales of securities and other assets	-227	600	1,232	1,416	1,888	1,630	1,692	169	-51	6	-
Other operating revenue	605	117	108	165	305	210	1,100	1,057	1,432	1,631	3,532
<b>Operating expenses</b>	<b>28,143</b>	<b>31,290</b>	<b>41,666</b>	<b>46,360</b>	<b>44,711</b>	<b>42,788</b>	<b>40,122</b>	<b>41,118</b>	<b>47,843</b>	<b>47,895</b>	<b>45,542</b>
Depreciation and amortization	143	175	209	238	272	297	310	976	1,070	1,076	1,281
Interest	17,476	20,203	27,678	32,401	28,718	21,811	19,236	19,418	27,056	25,677	20,134
On deposits	17,476	20,203	27,678	32,401	28,718	21,811	19,236	19,418	27,056	25,677	20,134
Demand	6,078	6,891	10,637	13,149	9,597	5,383	3,441	3,135	4,722	3,739	2,432
Term	11,398	13,312	17,040	19,250	19,119	16,426	15,794	16,281	22,332	21,936	17,699
Other operating expenses	10,524	10,906	13,775	13,717	15,718	20,675	20,572	20,719	19,713	21,139	24,125
Provision for future loan losses	2,463	1,671	3,013	1,900	2,598	6,481	5,028	3,827	2,854	2,159	2,097
Other	8,061	9,234	10,759	11,817	13,119	14,191	15,543	16,890	16,856	18,978	22,024
<b>Operating profit</b>	<b>2,677</b>	<b>4,416</b>	<b>3,992</b>	<b>4,670</b>	<b>5,703</b>	<b>1,505</b>	<b>3,870</b>	<b>5,798</b>	<b>9,000</b>	<b>11,799</b>	<b>15,568</b>
Other expenses	873	896	1,427	1,493	1,617	1,453	1,574	2,364	3,375	4,628	7,297
Interest on borrowing	873	896	1,427	1,493	1,617	1,453	1,574	2,364	3,375	4,628	7,297
Gains/losses not elsewhere specified	-	649	696	814	762	856	-105	-	-	-	-
Profit before income tax	1,804	4,169	3,260	3,990	4,849	908	2,189	3,435	5,622	7,169	8,269
Income tax	1,271	1,975	1,484	1,291	1,658	451	1,125	1,324	2,122	2,704	3,588
Equity in affiliates' earnings	-	-	-	-	-	-	-	-	-	-	-
Profit before extraordinary gains	535	2,220	1,734	2,788	3,151	400	1,073	2,110	3,498	4,462	4,679
Extraordinary gains	-	10	-	-	-	-	-	-	-	-	-
<b>Net profit</b>	<b>535</b>	<b>2,232</b>	<b>1,734</b>	<b>2,788</b>	<b>3,151</b>	<b>400</b>	<b>1,073</b>	<b>2,110</b>	<b>3,498</b>	<b>4,462</b>	<b>4,679</b>

1. Excludes credit unions and trust companies. Includes a number of minor banking-type institutions such as establishments operating under the Quebec Savings Bank Act or other equivalent provincial acts and government savings establishments operating under federal and provincial legislation (Ontario Savings Offices, Alberta Treasury Branches).

Source: Statistics Canada, CANSIM, matrix 3968.



13.8 Trust Companies<sup>1</sup>

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions										
<b>Assets</b>	<b>89,454</b>	<b>103,725</b>	<b>117,994</b>	<b>127,727</b>	<b>127,230</b>	<b>122,093</b>	<b>83,641</b>	<b>70,925</b>	<b>67,776</b>	<b>68,794</b>	<b>53,538</b>
Cash and deposits	3,556	3,552	2,076	1,914	2,722	3,388	1,286	906	1,039	943	884
Accounts receivable and accrued revenue	953	1,720	1,866	2,079	1,591	1,505	939	552	435	335	353
Investments and accounts with affiliates	1,894	2,205	1,746	1,970	1,546	1,263	1,444	1,641	1,653	1,917	2,663
Portfolio investments	14,251	16,085	20,347	21,372	20,231	18,038	13,315	11,499	11,977	10,491	10,555
Loans	68,310	79,307	90,918	99,333	99,885	97,200	66,114	55,491	52,185	54,599	38,480
Mortgage	55,871	64,858	76,077	82,624	82,725	80,594	53,390	43,896	40,278	39,454	23,736
Non-mortgage	12,439	14,448	14,840	16,709	17,159	16,605	12,723	11,594	11,907	15,145	14,743
Allowance for losses on investments and loans	-504	-307	-305	-573	-965	-1,639	-1,038	-776	-695	-598	-414
Capital assets, net	658	661	726	907	1,212	1,466	1,028	903	779	628	359
Other assets	336	500	618	723	1,004	869	552	707	401	476	657
<b>Liabilities</b>	<b>85,653</b>	<b>99,067</b>	<b>112,517</b>	<b>121,711</b>	<b>121,555</b>	<b>116,852</b>	<b>79,450</b>	<b>67,731</b>	<b>64,861</b>	<b>65,783</b>	<b>51,190</b>
Deposits	80,480	92,991	105,970	115,048	113,660	110,969	75,186	64,065	60,649	60,280	47,374
Demand	19,481	23,182	25,723	26,214	25,702	24,364	18,175	13,980	13,047	14,154	11,521
Term	60,999	69,809	80,247	88,833	87,957	86,605	57,010	50,084	47,601	46,126	35,853
Accounts payable and accrued liabilities	2,568	3,315	3,873	4,358	4,229	4,207	2,362	1,850	2,068	1,762	1,600
Loans and accounts with affiliates	793	598	510	345	424	254	350	251	341	420	325
Borrowings	1,042	1,486	1,449	1,370	2,465	1,076	1,255	1,373	1,493	3,104	1,871
Loans and overdrafts	1,007	1,061	994	944	1,302	692	897	787	642	1,030	924
From banks	215	400	414	120	400	96	89	114	116	23	114
From others	792	660	579	824	901	596	808	672	526	1,007	809
Bonds and debentures	19	394	388	393	983	344	330	558	823	2,046	919
Mortgages	16	30	27	32	130	38	27	27	28	27	27
Deferred income tax	266	186	172	17	-43	-362	-239	-54	-86	-119	-113
Other liabilities	504	488	540	569	818	707	535	245	395	333	130
<b>Equity</b>	<b>3,801</b>	<b>4,657</b>	<b>5,477</b>	<b>6,016</b>	<b>5,675</b>	<b>5,240</b>	<b>4,191</b>	<b>3,194</b>	<b>2,915</b>	<b>3,011</b>	<b>2,347</b>
Shared capital	1,996	2,026	2,304	2,547	2,691	4,433	3,156	2,819	2,318	2,160	1,901
Contributed surplus and other	1,008	1,195	1,650	2,057	2,149	1,130	498	43	41	38	5
Retained earnings	797	1,436	1,522	1,411	834	-323	536	331	554	812	440
Appropriated	7	—	—	5	-38	—	—	—	—	—	—
Unappropriated	790	1,436	1,522	1,406	872	-323	536	331	554	812	440

1. At December 31 of each year.

Source: Statistics Canada, CANSIM, matrix 3964.

## 13.9 Life Insurance Benefit Payments

	1991	1992	1993	1994	1995	1996	1997
	\$ millions						
<b>All payments</b>	<b>14,521.63</b>	<b>15,819.87</b>	<b>18,708.33</b>	<b>21,730.79</b>	<b>23,355.02</b>	<b>22,699.72</b>	<b>21,071.06</b>
Life insurance	4,663.54	4,903.57	4,926.43	4,932.78	5,653.14	5,570.67	5,684.37
Death and accidental death claims	2,250.93	2,520.56	2,538.78	2,379.36	2,871.48	2,846.71	2,991.15
Disability payments	51.41	38.15	48.98	37.20	37.19	48.51	38.19
Matured endowments	69.69	72.48	73.52	79.00	73.35	73.31	66.84
Surrender values	991.91	948.19	994.78	1,116.43	1,355.01	1,248.63	1,197.50
Dividends to policyholders	1,299.60	1,324.20	1,270.38	1,320.77	1,316.11	1,353.50	1,390.69
Annuities	9,858.10	10,916.29	13,781.90	16,798.02	17,701.88	17,129.05	15,386.70
Individual policies	8,681.58	9,610.43	11,385.88	14,339.52	13,226.79	14,753.89	14,333.04
Group policies	5,840.05	6,209.43	7,322.47	7,391.27	10,128.22	7,945.83	6,738.02

Source: Statistics Canada, CANSIM, matrix 56.





SECTION

## **The Nation**

*The Government*

*The Legal System*

# 4





# *The Government*

## **C h a p t e r**

## **F o u r t e e n**

*“Governments in democracies are elected by the passengers to steer the ship of the nation,” wrote the late Eugene Forsey, one of Canada’s foremost constitutional experts. “They are expected to hold it on course, to arrange for a prosperous voyage, and to be prepared to be thrown overboard if they fail in either duty.”*

*In the 1990s, governments in Canada have been trying to steer the ship through troubled financial waters, ever mindful of*





Work by Charles Pachter (further details see Appendix C)

### *The Painted Flag*

the public purse. They have largely concentrated on measures to curb growing deficits, often with tax hikes or spending cuts.

In 1995, for example, the Canadian government identified the deficit as its fundamental challenge. Interest on the debt had crowded all other spending and it was growing faster than the economy. In 1998, having steered a course for lower deficits for four years, the government announced a zero deficit, the first since 1969–70.

A Debt Repayment Plan will now be deployed: \$3 billion each year will be available to begin paying down the debt, which is distinct from the deficit. (While our zero deficit now means that government borrowing and spending during the fiscal year have not exceeded the income generated by taxes, the result of past deficits accumulating year after year has been our debt—\$583 billion in 1998—and it is this inheritance which the government is now focused on reducing.)

Canadians have generally approved this course of action: in the June 1997 general election, the Liberal government, which had campaigned on the economic turnaround, was re-elected with a majority.

With the opening of the 36th Parliament in September 1997, the government said it would continue to create jobs and encourage economic growth. It also claimed these priorities: investment in knowledge, education, good health care for Canadians, and help for low-income families with children.

Its most important stated commitment, however, is to keep Canada united. In October 1995, Quebec held its second sovereignty referendum, and although the federalist side won, it did so by the slimmest of majorities: 50.6% in favour, and 49.4% opposed. Soon after, Parliament passed a resolution recognizing Quebec as a distinct society. Then, in 1996, a bill was passed guaranteeing Canada's five major regions that no constitutional change concerning them would be made without their unanimous consent.

In September 1996, the Canadian government, anticipating a further referendum in Quebec, referred three questions on the secession of Quebec to the Supreme Court. The Court was asked whether, under the Constitution of Canada, Quebec can secede from Canada unilaterally; whether international law gives Quebec the right to do so; and, in the event of a conflict between Canadian and international law, which would take precedence in Canada.

In the early fall of 1997, a week before Parliament opened, nine provincial premiers (all except for Quebec's premier) and the two territorial leaders met in Calgary and agreed on a framework for consulting Canadians on strengthening the federation. The framework described the unique character of Quebec society as fundamental to the well-being of Canada, and recognized the role of the Government of Quebec to protect and develop this unique character.

## POWER AND PROCESS

This federation that has drawn both defenders and detractors to such heated debate has existed as such since 1867, when Canada first came into being. Today, as it was then, Canada is a constitutional monarchy and a federal state with a democratic parliament.

### The Electorate

The Charter of Rights and Freedoms grants every Canadian citizen the right to vote in a federal or provincial election. At the federal level, Canadians elect members of Parliament to the House of Commons to make decisions and enact laws on their behalf. Elections in Canada usually occur every four to four and one-half years; the maximum duration of a parliament according to the Constitution is five years.

Canada's electoral system is based on political parties. Official party status is conferred on parties with at least 12 seats in the House of Commons; along with this status comes additional public money for research, and the right to ask questions in the Commons' daily Question Period.

In June 1997, Canadians exercised their right to vote in Canada's 36th general election. Voters returned a Liberal government, although with a reduced majority. They also brought in a new official opposition, the Reform Party of Canada, which replaced the Bloc Québécois. The number of parties with official standing in the House of Commons increased from three to five as the Progressive Conservatives and New Democrats regained official party status.



*Photo by Duncan Cameron, National Archives of Canada, PA-169756*

**Counting election ballots, June 1957.**



The five parties with official status are far from the only parties from which Canadians can choose. At the 1997 general election, there were 10 registered political parties at the federal level. Candidates without party affiliation, usually designated “independent,” may also run for election.

Our system is referred to as a “first-past-the-post” system: the candidate with the most votes in an electoral district (or riding) wins the seat in the House of Commons, even though the number of votes may be less than 50% of the total (an absolute majority).

Consequently, the number of parliamentary seats a particular party holds may not correspond closely to the percentage of votes it receives nationally. In the June 1997 election, for example, the Liberal Party took 51% of the seats with just 38% of the popular vote while the Progressive Conservatives took only 7% of the seats although they netted 19% of the popular vote. This contrasts with a proportional representation system, in which a party's proportion of the popular vote very closely matches its representation in the legislative assembly.

## **Electoral Reform**

Representation in the House of Commons is based on geographical divisions called electoral districts. Commissions are set up every 10 years to make any necessary revisions to riding boundaries, taking into account population and social and economic links. As a result of several electoral reforms, in 1996, the number of ridings increased from 295 to 301. Ontario has the most seats at 103; the Yukon Territory has the least, with just one.

The federal election process is undergoing a major change: in April 1997, some 96,000 enumerators visited Canadian households for the last time to gather voter information. Elections Canada (the non-partisan agency responsible for the administration of federal elections and referendums) used the information collected in this final door-to-door enumeration to establish a National Register of Electors.

The National Register is a computer database that includes the name, address, gender and date of birth of Canadians qualified to vote. Register information will be used to produce the electoral list for federal elections, by-elections and referendums. The Register will be updated using existing government data sources, information supplied by electors, and electoral lists from other Canadian jurisdictions. Replacing the old door-to-door enumeration with the new National Register will make it possible to have a shorter election period (a minimum of 36 days instead of 47).

In addition, recent changes to electoral law provide for extended voting hours that are also staggered across the country's six time zones. Previously, the election outcome was frequently decided before electors in Western Canada had voted. Most results are now available at approximately the same time across the country.

## **THE EXECUTIVE**

After an election, the party with the most seats forms the government, and the party leader becomes prime minister. Following the 1997 general election and the Liberal Party's return to power, Jean Chrétien remained Canada's 26th prime minister. The party with the second highest number of seats becomes the official opposition: in this case, it was the Reform Party.

The prime minister is formally appointed by the governor general, the Queen's representative in Canada. Although the prime minister's position and responsibilities are not defined by law or in a constitutional document, the federal government leader is the most powerful figure in Canadian politics.

The prime minister then chooses ministers to head government departments. The prime minister and ministers make up the Cabinet (or executive branch of the government). Customarily, ministers are members of Parliament from the prime minister's party. There is usually also one cabinet member from the Senate: the Government Leader in the Senate,



## *What's the Matter with the Hen?*

*As Canada the fledgling country grew, various coats of arms, flowers, trees, birds, animals and even fish were adopted as symbols for its provinces and territories. Nationally, the beaver, as the most significant animal of the fur trade, was identified as an emblem well over 300 years ago, while the maple leaf appears to have been considered as a symbol as early as 1700.*

*On February 15, 1965, the Maple Leaf flag was officially unfurled, but not without a heated debate in Parliament and throughout the country. Other debates have been less successful, and to some extent more amusing.*

*Take the one about the bird emblem. It began in 1927, when three Canadian*

*poets—Bliss Carman, Sir Charles G. D. Roberts and George Frederick Clarke—decided Canada should have a bird emblem and proposed the white-throated warbler, since it made a call that sounded like “sweet sweet Canada Canada Canada.”*

*The famous naturalist Jack Miner countered with the suggestion it should be the Canada goose, and from there a series of sardonic suggestions duly arrived on the editor's desk of the Globe and Mail.*

*Here are some excerpts:*

*“And just now as we are approaching Government liquor control, don't you think the “swallow” would be appropriate?”*

*“Why not choose the bat, which is the most popular among the baseball fans and players and is just as beautiful as the English bulldog?”*

*Although the debate ebbed of its own accord, it was not without the creation of a fair canon of poetry and other Canadian chirpings of the time. Wrote one wag:*

*“Publish the praises far and wide  
Of eggs, boiled, scrambled, poached or fried,  
Should birds inspire your soulful pen,  
Just what's the matter with the hen?”*

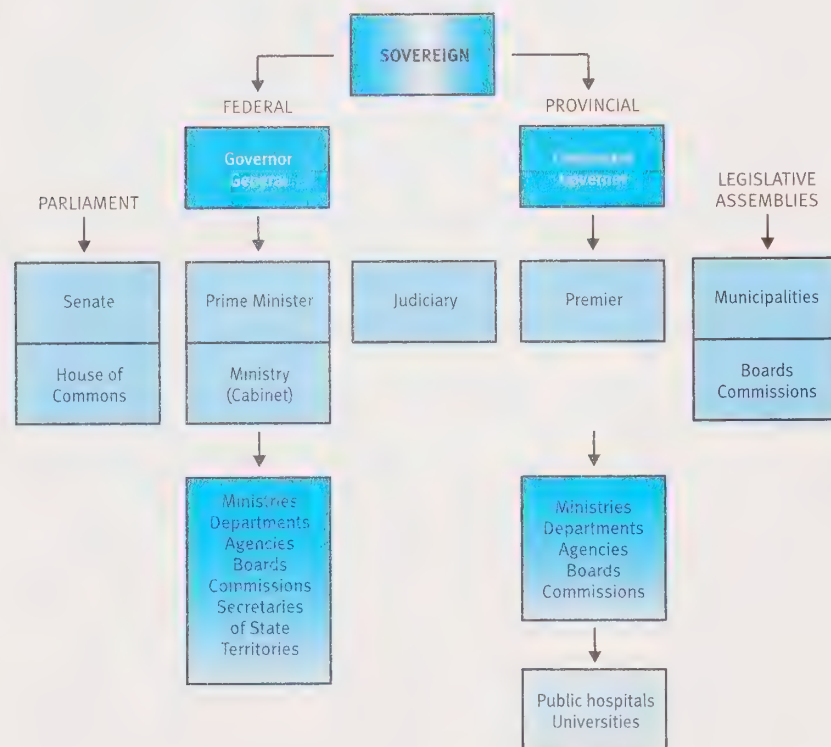
*A postscript: Canada Year Book editors researched the white-throated warbler and discovered there is no such creature. However, a white-throated sparrow does exist, with the characteristic Oh, sweet Canada song.*

*Were our three poets either ornithologically challenged or joking? We leave the answer for your conjecture...*

who represents the government in the upper chamber.

The Cabinet determines government policies and introduces most legislation, and it alone has the power to introduce money bills—those imposing taxes or proposing the spending of public money.

### The Canadian Government



The Cabinet draws research and other support from the Public Service, that is, government departments, agencies and Crown corporations. Public servants in these organizations advise ministers to help shape policies and laws. They also serve citizens by delivering services under existing policies and laws.

## THE LEGISLATURE

A legislature is a group of people having the duty and power to make laws for a country, province or state. This group may be elected (as are members of Parliament and provincial legislatures) or appointed (as are members of the Senate). The federal legislature comprises Her Majesty, the Queen, the Senate and the House of Commons.

### The Monarchy

Queen Elizabeth II is the Queen of Canada and our constitutional head of state, making Canada a constitutional monarchy. Except when she is in Canada, the Queen delegates her duties, which are mainly ceremonial, to her representatives in Canada: the governor general and the provincial lieutenant-governors. Formally, the prime minister and the Cabinet advise the Queen. Practically, however, the Cabinet holds the power and the governor general, as the Queen's representative, acts on the Cabinet's advice.

The governor general, who is now always a Canadian, carries out the Queen's duties in Canada on a daily basis and is an integral part of the Canadian government. The Queen appoints the governor general on the prime minister's advice. Representing the Crown in Canada, the governor general gives royal assent to bills passed by the House of Commons and the Senate, summons, opens and ends sessions of Parliament, and dissolves Parliament for an election.

## *We Remember Them*

*A little piece of Canada resides in France—granted in 1922 by the French nation for the people of Canada to use for all time. No bigger than 100 hectares, it is the site of the Canadian National Vimy Memorial Park, a tribute to Canadians who risked or gave their lives during the First World War.*

*In 1997, Canada designated the battlefields and monuments at Vimy Ridge and also the memorial at Beaumont-Hamel as national historic sites, the only such designations outside the country. While Vimy reminds us of the capture of Vimy Ridge by Canadian troops on April 9, 1917, the memorial at Beaumont-Hamel is a*

*record of the losses suffered by the Newfoundland Regiment on the first day of the Battle of the Somme, July 1, 1916.*

*The Vimy memorial stands on Hill 145, the highest point of the 14-kilometre Vimy Ridge, and is surrounded by restored trenches and subways and by shell-pocked, reforested grounds overlooking the fields and rolling hills of the French countryside. Some 30 cemeteries within a 16-kilometre radius of the memorial contain the graves of more than 7,000 soldiers.*

*At Beaumont-Hamel, the park includes 16 hectares of land purchased from 250 French landowners and is the largest of five*

*memorials in France and Belgium commemorating Newfoundlanders (Newfoundland had not yet joined Canada) who served in the First World War. Lombardy poplars and native Newfoundland trees and shrubs grow at Beaumont-Hamel, which officially opened in 1925. Three bronze tablets at the base of a caribou statue list the names of some 820 members of the Royal Naval Reserve and the Mercantile Marine with no known grave.*

*Vimy and Beaumont-Hamel are but two of the 13 battlefield memorials in Belgium and France commemorating the service of Canadian and Newfoundland troops in the*



*First World War. As well, the “Unknown Warrior” buried at Westminster Abbey in London represents all missing British Commonwealth soldiers of the First World War.*

*In the Books of Remembrance in Ottawa's Parliament Buildings, one can find inscribed the names of the nearly 67,000 Canadians who died in action or of their war wounds between 1914 and 1918, the nearly 45,000 who died in the Second World War, the 500 who were killed in the*

*Korean conflict, as well as those who died in the Nile Expedition and the South African War. The Newfoundland Book of Remembrance lists the 2,700 soldiers from its province who died in the two world wars.*

*In Ottawa, the National War Memorial was unveiled in 1939 to commemorate Canadian sacrifices in the First World War, but has since been rededicated to honour those Canadians who served their country in the Second World War and Korea.*

*Canada Year Book editors chose this excerpt from Laurence Binyon's poem, “For the Fallen,” which is recited at Royal Canadian Legion meetings, as our own way of commemorating those heroes who are far away, but still in Canada:*

*“They shall grow not old, as we that are left  
grow old:  
Age shall not weary them, nor the years  
condemn.  
At the going down of the sun and in the  
morning  
We will remember them.”*

## The Senate

The Senate is often described as “the chamber of sober second thought.” It was established partly to protect the interests of Canada’s less populous regions. For this reason, membership is based on regional representation and not representation by population.

The Senate usually has 104 seats: six from Newfoundland; 24 from the Maritime provinces (10 from Nova Scotia, 10 from New Brunswick, four from Prince Edward Island); 24 from Quebec; 24 from Ontario; 24 from the western provinces (six each from Manitoba, Saskatchewan, Alberta and British Columbia); and one each from the Yukon Territory and the Northwest Territories.

Senators are appointed—by the governor general on the prime minister’s recommendation—rather than elected. Party standings in the Senate in October 1997 were as follows: Liberals, 52; Progressive Conservatives, 47; and independents, 3. There were two vacant seats.

The Senate is not as powerful as the House of Commons—it cannot initiate bills to spend public money or raise taxes, for example. It has three basic functions. In its main role, the Senate is responsible for reviewing government bills. In its investigative role, special Senate committees look into major social and economic issues or proposed legislation. In its deliberative role, the Senate is a national forum for debating public issues and airing regional concerns.

## The House of Commons

The House of Commons is Canada’s elected federal legislative body: it represents the people of Canada. A typical day in the House of Commons includes Question Period, when opposition members get the chance to pepper ministers with questions on government policy. Most of the day, however, is taken up with considering bills.



*Photo by Kelsey Studio, National Archives of Canada C-6906*

**Agnes Campbell MacPhail, first woman member of the House of Commons, 1921.**

## THE CREATION OF A LAW

After the title, the first words one comes across in a Canadian statute (or law) are: “Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows . . .”

In fact, a bill (or proposed law) becomes law by passing through readings in the legislature and then receiving royal assent. Bills may be introduced either by the government (government bills) or by senators or members of the House of Commons (private members’ bills). However, bills to spend or raise money must be introduced by a cabinet minister in the House of Commons.

After it has been introduced, a bill can be removed or withdrawn, defeated, amended, passed, or it may “die on the Order Paper” when the legislature recesses. Bills must pass through three readings in both the House of Commons and the Senate. The governor general, as the Queen’s representative in Canada, completes the process by giving royal assent.

The traditional process begins with the first reading of a bill. At this stage, there is no debate or vote. Afterwards, the bill is printed and distributed to members of the House of Commons. A sponsor may sometimes give a brief explanation of the bill.

At a later sitting, the sponsoring member moves that the bill be given second reading and referred to an appropriate House of Commons committee, such as the Aboriginal Affairs and Northern Development, Fisheries and Oceans or Transport committees. The bill’s general principles are debated at this stage, as the House decides if the bill is actually needed and, if so, whether it is sound. After debate, the bill is put to a vote.

If the bill is approved in principle, the next step begins as a designated House committee considers the bill clause by clause, calling on expert witnesses if necessary. When the study is completed, the committee refers the bill—with or without amendments—back to the House of Commons.

At third reading, amendments that do not contradict the principle of the bill may be considered and the appropriate minister moves that the bill be passed. If the vote is favourable, the bill is introduced in the Senate, where it goes through a similar process.

Senate consent should not be taken for granted, however. The Senate does not fall under Cabinet control, and the majority of its members may have quite different party affiliations from those of the majority of the House.

As an alternative to the traditional process, government bills may be referred to a committee before second reading, or a minister may ask a committee to prepare and bring in a bill.

Finally, before becoming law, a bill must receive royal assent from the governor general. In Canada, royal assent to federal legislation has never been denied. The bill then comes into force, unless it includes a provision for becoming law at a later date.

## RESPONSIBLE GOVERNMENT

Canada’s government is “responsible” government: Cabinet is responsible, or accountable, to the House of Commons. If it fails to keep the support of a majority in the House, it must, by convention (although not by law), make way for a new government or call an election. In turn, the House of Commons is accountable to the people through the electoral process. This contrasts with the American presidential-congressional government. Bills put forward by American presidents may be blocked by one or both houses of Congress for years, yet the president can remain in office.

While Canada and the United States are both democracies and federal states, their governments differ in important ways. A basic difference is that Canada is a constitutional monarchy with a head of state (the Queen) and a head of government (the prime minister), while the United States is a republic, with the president being both head of state and head of government.



## Canadian Beginnings

Our system is based on custom to a far greater extent than that of the United States. For example, our constitution says nothing about prime ministerial qualifications, method of election or removal, or powers. All these things are set out in the American constitution.

In addition, the two systems of government grew out of opposite approaches to federalism: Canada's Fathers of Confederation envisioned a strong central government whereas the American version—as the name United States implies—has always been highly decentralized. Today, Canada is becoming more decentralized while the United States is becoming less so.

### THE JUDICIARY

The third branch of government, along with the executive and legislative branches, is the judiciary. Judges determine whether laws have been broken or whether they are unconstitutional. For example, judges can determine whether they are contrary to the Canadian Charter of Rights and Freedoms or whether they fall outside the jurisdiction of Parliament or provincial legislatures. Canada's judiciary is independent: it is not controlled by Cabinet or Parliament, so it can carry out its duties impartially. It also means that the government cannot revoke court appointments, except for cause.

### THE FEDERATION

Canada is a federal state: a nation formed by the union of separate provinces that are governed by a common body for common purposes, and by separate provincial governments for the purposes of the provinces. The Constitution Act, 1867, remains the basis of our written constitution. Among other things, it sets out the respective powers of Parliament and the provincial legislatures.

*In 1884, the Ottawa Citizen ran the passage below, reflecting the pride of early Canadians in their ability to establish a government in the prairies, what was once a wild and lonely land.*

*“Two years have not yet elapsed since the Northwest was the Great Lone Land, known to us only through the graphic pen of a Milton, or the dashing style of a Butler.*

*It says something for the Government and Constitution of Canada that the railway whistle had hardly started for the first time the wild silence of illimitable plains, when a quasi-representative Assembly was deliberating in the capital of the Northwest (then Regina) and passing an Ordinance for the establishment of Municipal institutions.*

*The country had been practically before this under military rule; the Indian, the hunter, the smuggler, the trader—of such*

*was the population of the Northwest,  
and the duties of keeping out liquor, of  
preserving order, of maintaining law,  
were all discharged by the Mounted  
Police.*

*But with the smoke of the locomotive,  
and the ease of the pullman car, the  
poetry of adventure, or of real or  
supposed danger, the genuine charm of  
hardship, long rides through blizzards,  
hard tack, bacon, pemmican, and a fair  
chance of being frozen; all this  
disappeared like the dream of a school  
girl during her early days of fashionable  
gaiety.*

*Civic man stood on the prairie and  
reared his little cities and built his farm  
houses, and the first burst of excitement  
over, he began to ask himself how he was  
governed?"*

The national Parliament has the power “to make laws for the peace, order and good government of Canada” in areas under its jurisdiction. As well as a long list of exclusive powers—regulation of trade and commerce, the post office and defence, for example—the Fathers of Confederation gave all powers not specifically conferred on the provinces to the federal government.

Matters assigned to the provinces include taxation for provincial purposes, natural resources, most hospitals, municipal institutions, property and civil rights, and education (subject to certain minority rights). The provinces can also amend their own constitutions, but only on matters over which they have power, as assigned by the Constitution. They cannot assume powers assigned to the federal government and the federal government cannot assume provincial powers.

The provincial legislatures each have one legislative body, whose members are elected for a maximum five-year term. Provincial assemblies function much like the House of Commons.

The federal and provincial governments share powers in some areas such as agriculture, immigration and certain aspects of natural resources. However, if the laws conflict, the national law prevails. As a result of legal interpretation, labour legislation (except that pertaining to certain industries) and social security (except employment insurance and shared power over pensions) come under provincial law. But in 1957, after extensive federal-provincial talks, Parliament passed legislation that in effect established a national health-care system by giving grants to the provinces on the condition that provincial plans meet certain standards.

The Constitution Act, 1982, did not give Canada a new constitution. Rather, it made four important additions to the old one. It established four legal processes for amending the Constitution; until then, such amending formulas had not existed. It entrenched certain parts of the Constitution so neither Parliament nor any provincial legislature can alter them. It brought into being the Canadian Charter of Rights and Freedoms. And it gave the



*Work by Joyce Wieland, National Gallery of Canada*

**O'Canada**



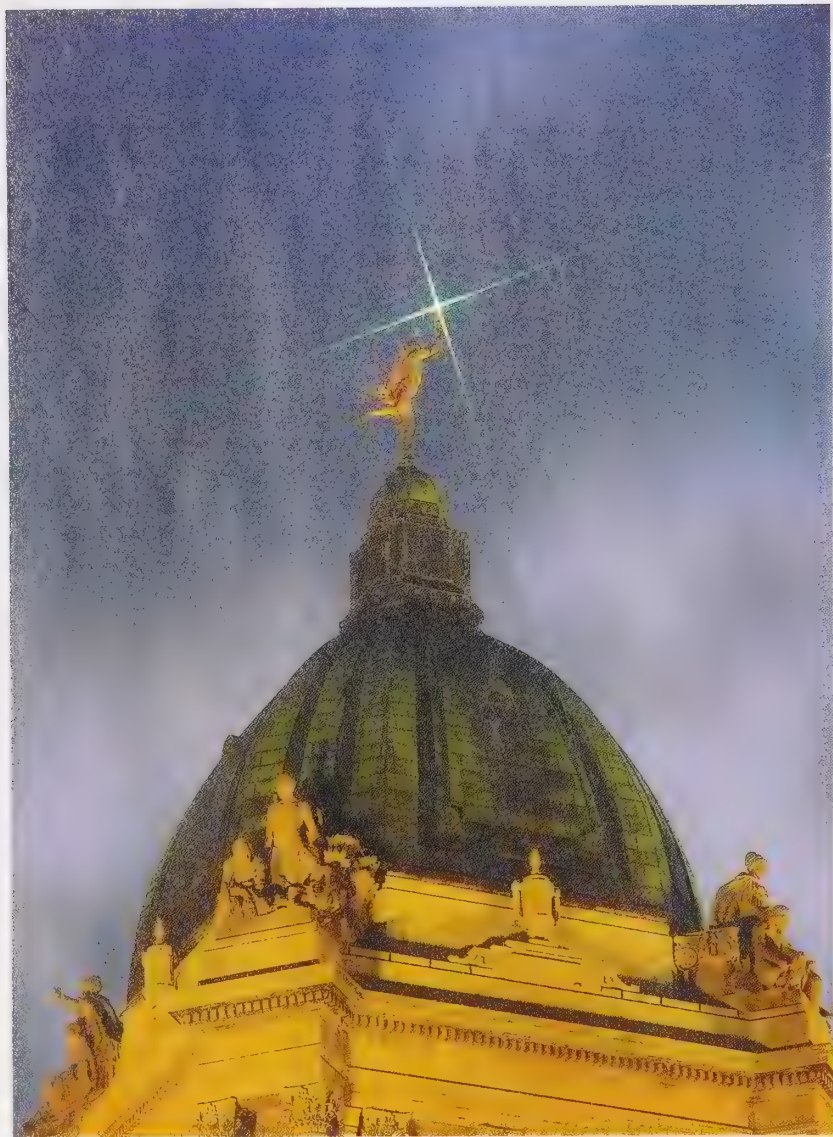


Photo by Malak

Dome of the legislative building, Winnipeg.

provinces broad powers over their natural resources.

While the federal and provincial governments have powers under the Constitution, the territories fall under federal administration. Legislative assemblies led by commissioners govern the territories. The commissioners perform duties similar to those of lieutenant-governors.

On April 1, 1999, a new Canadian territory, Nunavut, will be carved out of the Northwest Territories. The Nunavut Implementation Commission recommended that the territory's legislative assembly be elected based on two-member constituencies, with one man and one woman from each riding. However, in a plebiscite held in May 1997, some 57% of the 25,000 Eastern Arctic residents rejected the scheme, which would have been a global first had it been implemented.

Of the various layers of government, Canadians probably relate most easily to their local government, which provides services such as fire protection, road maintenance and snow removal. However, while the federal and provincial governments have constitutional standing, local governments, which may be municipal, metropolitan or regional, are created by the provincial and territorial governments.

## ABORIGINAL PEOPLES

The federal government has constitutional, political and legal responsibilities to First Nations, defined as the Indian, Inuit and Métis peoples. The Department of Indian Affairs and Northern Development (DIAND) is the government department primarily responsible for carrying out this function.

The Department must ensure that Status Indians (those recorded in the Indian Act register) living on reserves have access to the same basic services other Canadians receive from provincial and municipal governments. In December 1996, there were almost 611,000 Status Indians, 331,000 of whom lived on reserves.

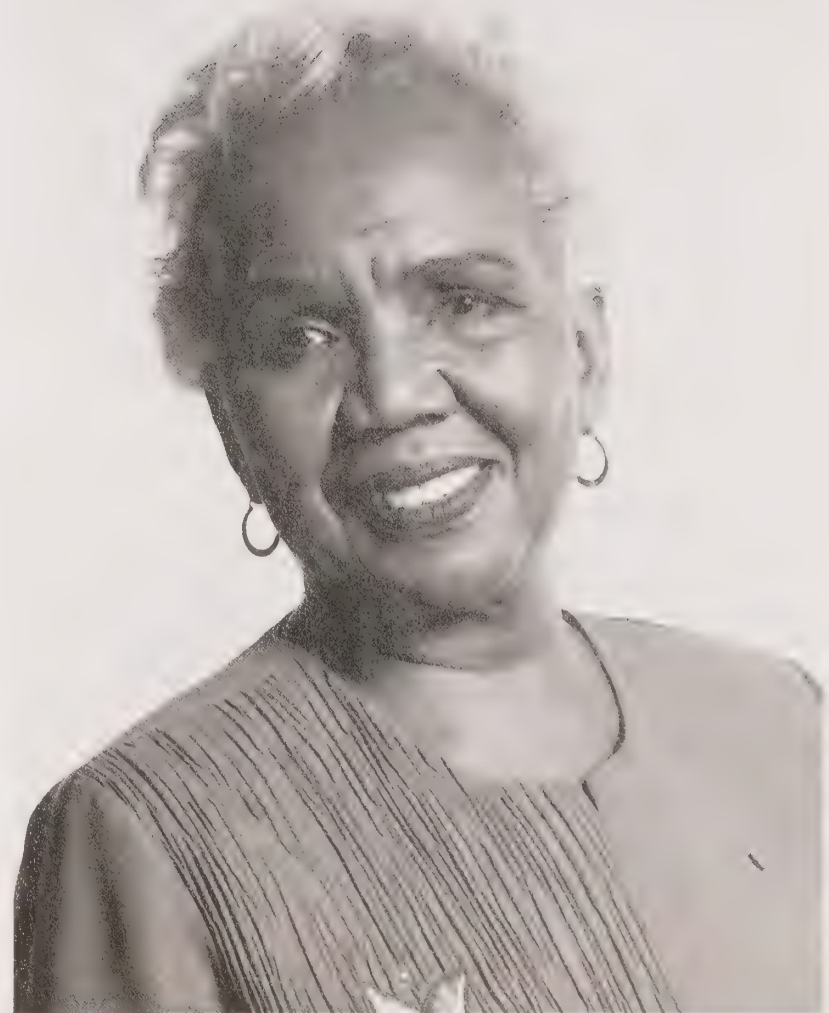
The Department is increasingly funding First Nations so that they can provide services for themselves. In 1997–98, federal expenditures by DIAND and 12 other federal departments and agencies for Aboriginal peoples totalled \$6 billion. Of the \$4.3 billion disbursed by DIAND, the largest share (\$983 million) was for building schools, infrastructure (e.g., roads, water, sewage systems) and housing, followed by education (\$899 million), and social assistance (\$671 million). Funding in the amount of \$39 million was used to promote self-government.

Aboriginal peoples' inherent right to self-government is acknowledged and protected by the Constitution. The Department of Indian Affairs and Northern Development negotiates and implements self-government agreements with First Nations and provincial and territorial governments. In 1997–98, more than 80 negotiations were under way, involving about one-half of all First Nations and Inuit communities.

"Canada is a test case for a grand notion—the notion that dissimilar peoples can share lands, resources, power and dreams while respecting and sustaining their differences," stated the Royal Commission on Aboriginal Peoples in its final report in 1996.

The Commission was established in 1991, with four Aboriginal and three non-Aboriginal commissioners. Its task was to help restore justice to the relationship between Aboriginal and non-Aboriginal people in Canada, and to propose practical solutions to problems. For example, at the time the Commission was established, Canadian leaders were debating the place of Aboriginal peoples in the Constitution; there was anger and upheaval among First Nations peoples; and disturbing facts about poverty, ill health, family breakdown and suicide in Aboriginal communities were coming to light.

In 1996, the Commission presented recommendations on a range of issues from treaties, economic development and health to housing and Métis perspectives.



*Detail of a photo by Rob Krut*

Rosemary Brown was the first black woman elected to any Canadian legislature, when she became a member of the British Columbia legislature in 1972.

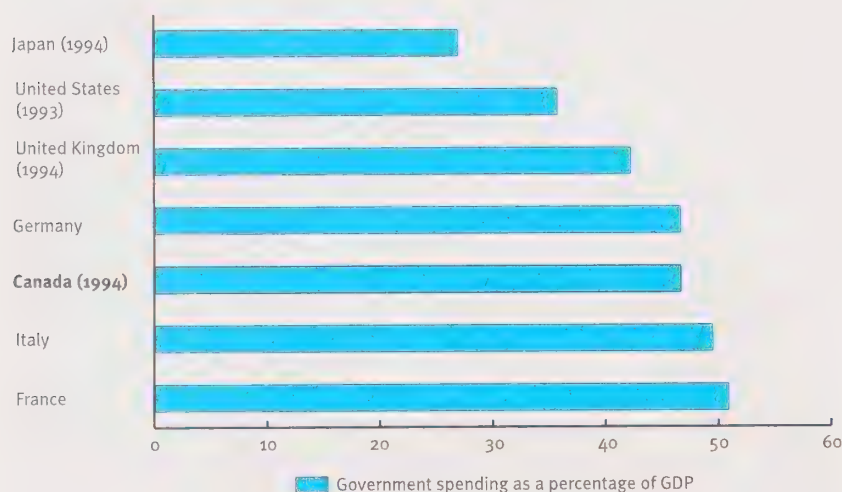


The commissioners' central conclusion, however, was to declare that Canadians need to understand that Aboriginal peoples are political and cultural groups with values and ways of life distinct from those of other Canadians.

## PUBLIC SERVICE EMPLOYMENT

In much the same way as industries, governments require resources to carry out programs and provide services. They therefore take in money (primarily through personal income taxes), and spend money. They also employ people.

Government spending, 1995



Source: *National Accounts, 1997*, Organisation for Economic Co-operation and Development.

Over the last few years, governments at both the federal and provincial levels have employed fewer people, while employment at the municipal level has increased slightly. In 1997, for example, the number of Canadians working in federal administration (not including the military) dropped 7.3% from the previous year, to 224,600. This was due largely to the reduction in permanent staff; the number of people hired on a short-term basis actually increased. Approximately two out of three departing employees received incentives to leave.

The decline in federal public service employment is a result of the government's Program Review. Announced in the 1994 federal budget, this review has focussed on a restructuring and streamlining of government programs and services, and reductions in government spending.

Years of downsizing are nonetheless taking their toll. The Clerk of the Privy Council, the head of the Public Service, claims it has become difficult to retain, motivate and attract people to the Public Service. To remedy this situation, in 1997, the Clerk initiated *La Relève*, a challenge to the Public Service to develop a strategic approach to human resource management and longer-term planning.

## MONEY MATTERS

The Constitution sets out the basic principles guiding the government's financial affairs: no tax shall be imposed and no money spent without the authority of Parliament; and expenditures must be in accordance with the conditions authorized by Parliament. The government introduces all bills to raise taxes or spend public money, and exercises financial control through a budgetary system that fixes the government's financial needs annually. The government's fiscal year ends on March 31st.

Generally in February of each year, the finance minister presents the federal budget. This sets out the government's projected revenues and expenditures with the resulting surplus or deficit. The 1998 budget



announced the elimination of the deficit. At the same time, it was forecast that the budgets for 1998–99 and 1999–2000 would also be balanced.

The remaining fiscal challenge would be that of diminishing the debt burden. Although the debt-to-GDP ratio—what is owed relative to what is produced—has started to fall, it still remains very high. In 1996–97, Canada's debt-to-GDP ratio recorded its first significant decline in a quarter of a century, falling to 71.1% from 71.9% in 1995–96. This decline means that economic growth has begun to outpace the growth of the debt, thereby reducing the burden of the debt on the economy.

It is predicted that the debt-to-GDP ratio will continue to decrease again through to 2000. The means used to keep the debt-to-GDP on a permanent downward path will consist of a two-pronged attack: continued investments to support strong economic growth, and a debt repayment plan that will bring down the absolute level of the debt.

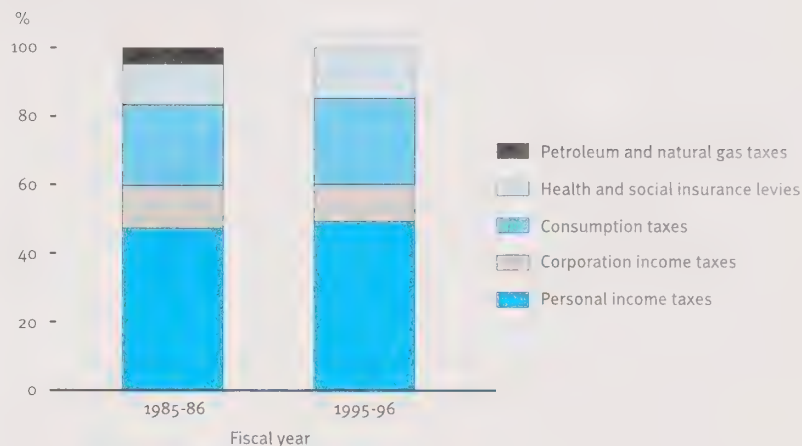
Government will include in its fiscal plans a contingency reserve of \$3 billion each year. This fund, when not needed, will be used to pay down the public debt. By 2000–02, up to \$9 billion in debt could be repaid.

The 1998 budget also contained the Canadian Opportunities Strategy. As a result, more than 100,000 students will have access to Canada Millennium Scholarships, averaging \$3,000 a year, and up to 25,000 students in financial need will be eligible for Canada Study Grants.

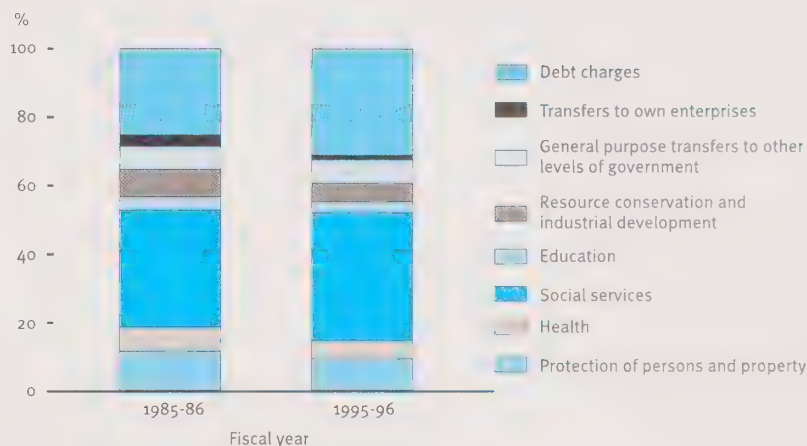
Families with children also benefitted from a further increase in the Canada Child Tax, and the budget also announced help with child care expenses and for the infirm or elderly family members.

The federal government provides funding to provinces and territories so they can deliver essential public services such as health care, post-secondary education and social services. These federal-provincial transfers assure Canadians of reasonably comparable services wherever they live, while allowing provinces the flexibility to provide programs reflecting their unique circumstances and needs.

**Federal government revenues**



**Federal government expenditures**



Source: Statistics Canada, CANSIM matrix 2780.

In 1996–97, a new single federal transfer to the provinces, the Canada Health and Social Transfer, replaced Established Programs Financing and the Canada Assistance Plan. The Canada Health and Social Transfer comes with certain conditions, however: the federal government will continue to enforce the Canada Health Act, and the provinces will have to provide social assistance without any minimum residency requirements.

Transfers have been steadily decreasing in recent years. In 1994–95, the federal government transferred \$19.3 billion for health and social services. That same year, all major transfers to other governments totalled \$38.2 billion. By comparison, in 1997–98, the government planned to transfer \$12.5 billion in cash payments and tax points to the provinces under the Canada Health and Social Transfer. Including cash transfers to the territories, all major transfers to other levels of government totalled \$33.6 billion.

The other major transfer is for the purposes of equalization. Equalization is really another way of talking about have and have-not provinces and territories. Depending on a province's ability to raise revenues, the federal government will come to its aid. In 1996–97, all provinces except Alberta, British Columbia and Ontario received these kinds of equalizing payments. In fact, the federal government paid \$8.5 billion to place the remaining provinces and territories on an equal footing.

## S O U R C E S

Department of Finance Canada  
Indian and Northern Affairs Canada  
Statistics Canada  
Treasury Board of Canada

### FOR FURTHER READING

Selected publications from other sources

- **Annual Report 1996-97.** Public Service Commission. 1997.
- **Employment Statistics for the Federal Public Service.** Treasury Board of Canada. 1994.
- **Fourth Annual Report to the Prime Minister on the Public Service of Canada.** Privy Council Office. 1997.
- **A History of the Vote in Canada.** Elections Canada. 1997.
- **How Canadians Govern Themselves.** Eugene A. Forsey. 1991.
- **1997-98 Estimates.** Indian and Northern Affairs Canada. 1997.
- **Report of the Chief Electoral Officer of Canada on the 36<sup>th</sup> General Election.** Elections Canada. 1997.



## The Government

### Legend

- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

*(Certain tables may not add due to rounding)*

### 14.1 Government Transfer Payments to Persons

	1992	1993	1994	1995	1996
	\$ millions				
<b>All government levels</b>	<b>98,734</b>	<b>103,700</b>	<b>104,656</b>	<b>105,439</b>	<b>106,103</b>
<b>Federal</b>	<b>53,045</b>	<b>55,576</b>	<b>54,269</b>	<b>53,145</b>	<b>53,477</b>
Family and youth allowances	2,870	37	37	38	39
Pensions, First and Second World Wars	856	848	853	896	911
War veterans' allowances	443	441	417	397	382
Employment Insurance benefits	18,648	17,592	15,012	12,889	12,324
Pensions to government employees	3,728	3,987	4,230	4,393	4,460
Old Age Security fund payments	18,776	19,479	20,170	20,622	21,283
Scholarships and research grants	726	727	779	687	686
Other transfer payments	1,868	1,659	1,652	1,632	1,735
<b>Provincial</b>	<b>25,580</b>	<b>25,973</b>	<b>26,867</b>	<b>28,046</b>	<b>28,055</b>
Social assistance, income maintenance	9,371	10,059	10,224	10,370	9,868
Social assistance, other	1,213	856	1,936	1,934	2,065
Workers' Compensation benefits	4,091	3,980	3,815	3,900	4,140
Pensions to government employees	1,570	1,514	1,313	1,370	1,512
Grants to benevolent associations	6,848	6,975	5,879	6,695	6,713
Other transfer payments	2,487	2,589	3,700	3,777	3,757
<b>Local</b>	<b>3,410</b>	<b>3,903</b>	<b>3,954</b>	<b>3,744</b>	<b>2,984</b>
<b>Canada Pension Plan</b>	<b>12,808</b>	<b>14,085</b>	<b>15,133</b>	<b>15,792</b>	<b>16,559</b>
<b>Quebec Pension Plan</b>	<b>3,891</b>	<b>4,163</b>	<b>4,433</b>	<b>4,712</b>	<b>5,028</b>

Source: Statistics Canada, CANSIM, matrix 9164.

14.2 House of Commons Seats<sup>1, 2</sup>

	All seats	Liberal Party of Canada	Reform Party of Canada	Bloc Québécois	New Democratic Party	Progressive Conservative Party of Canada	Independent and other
<b>Canada</b>							
1980	282	147	—	—	32	103	—
1984	282	40	—	—	30	211	1
1988	295	83	—	—	43	169	—
1993	295	177	52	54	9	2	1
1997	301	155	59	44	21	20	2
<b>1997</b>							
Newfoundland	7	4	—	—	—	3	—
Prince Edward Island	4	4	—	—	—	—	—
Nova Scotia	11	—	—	—	6	5	—
New Brunswick	10	3	—	—	2	5	—
Quebec	75	26	—	44	—	5	—
Ontario	103	101	—	—	—	1	1
Manitoba	14	6	3	—	4	1	—
Saskatchewan	14	1	8	—	5	—	—
Alberta	26	2	24	—	—	—	—
British Columbia	34	6	24	—	3	—	1
Yukon Territory	1	—	—	—	1	—	—
Northwest Territories	2	2	—	—	—	—	—

1. Following general elections.

2. Due to a resignation in 1997, the total number of members of parliament is 300.

Source: Library of Parliament, *Canadian Parliamentary Guide*, 1997.

## 14.3 Voting in Federal General Elections

	1984	1988	1993	1997	1984	1988	1993	1997	1984	1988	1993	1997
	Electors on the lists				Total ballots cast				Voter participation			
									%			
<b>Canada</b>	<b>16,775,011</b>	<b>17,639,001</b>	<b>19,906,796</b>	<b>19,663,478</b>	<b>12,638,424</b>	<b>13,281,191</b>	<b>13,863,135</b>	<b>13,174,788</b>	<b>75.3</b>	<b>75.3</b>	<b>69.6</b>	<b>67.0</b>
Newfoundland	370,219	384,236	419,635	407,109	242,491	257,793	231,424	224,722	65.5	67.1	55.1	55.2
Prince Edward Island	87,215	89,546	99,645	97,802	73,801	75,986	72,973	71,171	84.6	84.9	73.2	72.8
Nova Scotia	613,964	644,353	707,202	677,164	462,885	481,682	457,610	470,272	75.4	74.8	64.7	69.4
New Brunswick	491,169	508,741	562,128	551,530	379,850	386,201	391,247	404,921	77.3	75.9	69.6	73.4
Quebec	4,575,493	4,740,091	5,025,263	5,177,159	3,485,815	3,562,777	3,873,050	3,792,970	76.2	75.2	77.1	73.3
Ontario	5,882,320	6,309,375	7,266,097	7,115,785	4,461,416	4,706,214	4,918,819	4,664,515	75.8	74.6	67.7	65.6
Manitoba	704,585	729,281	791,374	758,526	516,053	544,756	543,339	479,110	73.2	74.7	68.7	63.2
Saskatchewan	673,289	675,160	704,248	679,806	524,566	525,219	488,755	444,004	77.9	77.8	69.4	65.3
Alberta	1,479,675	1,557,669	1,851,822	1,811,413	1,022,274	1,167,770	1,206,871	1,059,348	69.1	75.0	65.2	58.5
British Columbia	1,853,110	1,954,040	2,420,709	2,332,083	1,437,904	1,538,628	1,640,614	1,529,139	77.6	78.7	67.8	65.6
Yukon Territory	15,056	16,396	20,565	19,934	11,731	12,849	14,471	13,915	77.9	78.4	70.4	69.8
Northwest Territories	28,916	30,113	38,108	35,167	19,638	21,316	23,962	20,701	67.9	70.8	62.9	58.9

Source: Chief Electoral Officer of Canada, *Thirty-sixth General Election 1997: Official Voting Results*, Ottawa, 1997.

14.4 Public and Private Capital Expenditures, Government Services<sup>1</sup>

	1994	1995	1996	1997	1998 <sup>2</sup>
	\$ millions				
<b>All levels of government</b>					
Capital Expenditure	14,020.9	14,112.1	13,293.6	12,672.4	13,169.4
Construction	11,028.6	11,110.8	10,523.9	10,324.0	10,556.0
Machinery and equipment	2,992.3	3,001.2	2,769.7	2,348.3	2,613.5
<b>Federal</b>					
Capital Expenditure	3,529.1	3,344.1	3,317.5	2,609.6	2,502.5
Construction	1,691.6	1,568.1	1,752.1	1,408.8	1,220.4
Machinery and equipment	1,837.5	1,776.0	1,565.3	1,200.8	1,282.1
<b>Provincial</b>					
Capital Expenditure	3,958.7	3,685.8	3,538.7	3,418.0	3,422.5
Construction	3,471.3	3,184.2	3,061.1	2,996.8	2,981.0
Machinery and equipment	487.4	501.7	477.6	421.2	441.4
<b>Local</b>					
Capital Expenditure	6,533.1	7,082.1	6,437.5	6,644.8	7,244.5
Construction	5,865.6	6,358.5	5,710.7	5,918.4	6,354.5
Machinery and equipment	667.5	723.5	726.7	726.4	890.0

1. Data for the latest year shown are intentions. These are updated to revised intentions in late July.

2. Data for 1998 are revised intentions published on July 23, 1998.

Source: Statistics Canada, CANSIM, matrix 3109.



14.5 Federal Government Revenues and Expenditures<sup>1</sup>

	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
	\$ millions								
<b>Revenues</b>	<b>110,287</b>	<b>121,370</b>	<b>126,857</b>	<b>130,412</b>	<b>131,548</b>	<b>130,044</b>	<b>137,456</b>	<b>142,854</b>	<b>153,769</b>
Own source revenue	109,914	120,933	126,393	129,924	131,091	129,488	136,924	142,338	153,227
Income taxes	61,058	69,424	73,520	73,932	71,489	69,050	75,529	81,735	87,513
Personal income taxes	47,750	55,042	60,422	63,312	62,020	57,859	61,658	65,385	68,521
Corporation income taxes	11,730	13,021	11,726	9,359	8,278	9,919	12,432	14,739	16,855
Taxes on payments to non-residents	1,578	1,361	1,372	1,261	1,191	1,272	1,439	1,611	2,138
Consumption taxes	26,375	28,803	27,402	28,022	29,171	29,945	30,554	30,147	32,007
General sales taxes	15,744	17,768	16,866	15,461	17,236	18,308	19,510	19,032	20,923
Motive fuel taxes	2,542	2,414	2,472	3,438	3,454	3,683	3,820	4,397	4,439
Alcoholic beverage taxes	978	935	926	1,048	1,024	1,040	1,045	1,026	1,007
Tobacco taxes	1,728	2,097	2,247	3,403	2,981	2,570	1,914	1,941	2,031
Customs duties	4,527	4,592	4,005	3,999	3,811	3,652	3,576	2,971	2,677
Other consumption taxes	857	997	886	673	666	691	690	780	929
Miscellaneous taxes	1,005	944	914	897	857	1,021	1,116	1,358	1,620
Contributions to Social Security Plans	11,321	10,720	12,760	15,441	17,576	18,271	18,969	18,546	19,847
Sales of goods and services	3,748	3,983	4,220	4,241	4,448	5,074	5,276	4,337	6,782
Return on investments	5,523	5,976	6,766	5,833	6,026	5,560	4,812	5,232	4,640
Other revenue from own sources	883	1,085	812	1,558	1,525	566	667	982	818
Transfers from other levels of government	373	436	464	487	458	556	531	517	542
<b>Expenditures</b>	<b>136,954</b>	<b>149,392</b>	<b>159,230</b>	<b>169,028</b>	<b>172,150</b>	<b>169,750</b>	<b>173,008</b>	<b>175,385</b>	<b>167,294</b>
General services	4,435	4,618	5,296	5,431	5,816	5,556	5,720	5,402	5,125
Protection of persons and property	14,245	15,339	16,311	15,879	16,176	17,124	16,834	16,648	17,068
Transportation and communications	4,980	4,956	4,778	5,041	4,502	4,754	4,570	5,819	2,829
Health	7,726	7,822	7,402	8,087	9,811	8,911	9,404	9,066	1,189
Social services	39,224	43,042	48,083	54,416	57,509	57,994	54,400	53,987	48,343
Education	4,504	4,816	4,925	5,496	6,832	6,885	6,874	6,388	3,977
Resource conservation and industrial development	8,237	7,340	6,808	10,186	8,168	8,174	8,437	7,519	7,058
Environment	579	661	742	747	759	748	907	939	745
Recreation and culture	2,384	2,578	2,757	2,839	2,988	2,870	2,938	2,742	2,661
Labour, employment and immigration	1,941	2,151	2,332	2,485	2,742	1,942	2,157	2,228	1,222
Housing	1,598	1,736	1,979	1,905	1,980	1,945	1,988	1,940	1,973
Foreign affairs and international assistance	3,705	4,192	3,597	3,985	4,330	3,683	4,665	4,059	3,832
Regional planning and development	462	502	490	389	445	299	423	346	950
Research establishments	974	1,137	1,328	1,401	1,599	1,526	1,770	1,398	1,322
General purpose transfers to other levels of government	8,763	9,711	9,895	9,595	9,190	9,385	9,947	9,966	23,814
Debt charges	33,190	38,771	42,484	41,139	39,292	37,899	41,927	46,692	45,184
Other expenditures	8	20	22	8	10	57	47	47	2
<b>Surplus or (deficit)</b>	<b>(26,666)</b>	<b>(28,023)</b>	<b>(32,372)</b>	<b>(38,617)</b>	<b>(40,602)</b>	<b>(39,706)</b>	<b>(35,552)</b>	<b>(32,531)</b>	<b>(13,525)</b>

1. From April 1 to March 31.

Source: Statistics Canada, CANSIM, matrix 3315.

14.6 Provincial and Territorial Government Revenues and Expenditures<sup>1</sup>

	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions								
<b>Revenues</b>	<b>124,481</b>	<b>135,644</b>	<b>142,727</b>	<b>142,443</b>	<b>146,458</b>	<b>152,316</b>	<b>161,766</b>	<b>169,582</b>	<b>170,493</b>
Own source revenue	99,614	109,542	115,300	114,360	114,951	122,487	130,197	138,059	143,827
Income taxes	37,395	41,524	45,004	43,775	41,947	46,074	47,861	52,781	55,218
Personal income taxes	31,099	34,622	39,320	38,623	37,494	40,564	40,485	43,316	45,268
Corporation income taxes	6,296	6,902	5,684	5,152	4,453	5,510	7,376	9,465	9,950
Consumption taxes	28,177	30,157	30,516	31,376	31,791	33,297	35,041	36,941	37,460
Property and related taxes	3,609	4,175	4,224	4,296	4,936	5,118	6,345	6,493	7,150
General property taxes	1,120	1,242	1,660	1,767	1,945	1,979	2,954	2,982	3,008
Capital taxes	1,586	1,903	1,911	1,813	2,261	2,431	2,675	2,893	3,388
Other property and related taxes	903	1,030	654	716	730	709	716	618	754
General payroll taxes	2,349	3,128	5,502	5,625	5,646	5,817	6,217	6,636	6,792
Miscellaneous taxes	3,904	4,276	4,373	4,751	5,135	5,345	5,531	5,479	5,757
Contributions to Social Security Plans	5,360	5,790	5,624	5,376	5,677	5,765	6,182	6,553	6,431
Health and drug insurance premiums	2,591	2,320	993	1,144	1,199	1,232	1,361	1,442	1,499
Sales of goods and services	3,064	3,124	3,243	3,555	3,759	4,156	4,271	4,211	4,218
Return on investments	12,796	14,643	15,292	13,938	14,277	15,116	16,795	16,917	18,691
Other revenue from own sources	370	405	529	523	584	567	594	606	611
Transfers from other levels of government	24,868	26,103	27,427	28,083	31,507	29,829	31,568	31,522	26,666
<b>Expenditures</b>	<b>128,615</b>	<b>138,725</b>	<b>150,846</b>	<b>166,020</b>	<b>172,063</b>	<b>173,153</b>	<b>176,667</b>	<b>179,692</b>	<b>176,727</b>
General services	2,395	2,493	2,409	2,617	2,577	2,521	2,663	2,811	2,649
Protection of persons and property	4,764	5,250	5,854	6,322	6,358	6,317	6,217	6,293	6,266
Transportation and communications	7,127	8,128	8,792	8,578	8,393	7,660	8,717	8,810	8,477
Health	34,087	37,297	40,269	44,684	46,144	46,245	46,490	47,009	47,318
Social services	20,842	22,757	25,764	29,763	31,850	32,906	33,276	33,434	32,526
Education	26,611	27,682	30,257	33,064	34,227	33,741	34,075	35,613	34,203
Resource conservation and industrial development	7,766	8,751	8,228	10,138	9,610	8,480	7,512	7,169	6,935
Environment	1,615	1,910	2,144	2,235	2,116	1,956	2,200	2,235	1,998
Recreation and culture	1,624	1,737	2,213	1,873	1,891	1,677	1,717	1,771	1,697
Labour, employment and immigration	737	706	770	902	980	893	919	896	882
Housing	1,799	1,880	2,201	2,328	2,523	2,592	2,523	2,567	2,736
Regional planning and development	746	762	768	800	786	771	829	802	768
Research establishments	271	294	352	352	415	448	451	415	418
General purpose transfers to other levels of government	2,524	1,819	2,102	2,436	2,555	2,217	2,422	2,121	2,352
Debt charges	15,709	17,258	18,723	19,930	21,642	24,730	26,657	27,748	27,503
Other expenditures	—	—	—	—	—	—	—	—	—
<b>Surplus or (deficit)</b>	<b>(4,134)</b>	<b>(3,080)</b>	<b>(8,119)</b>	<b>(23,578)</b>	<b>(25,605)</b>	<b>(20,837)</b>	<b>(14,902)</b>	<b>(10,111)</b>	<b>(6,234)</b>

1. From April 1 to March 31.

Source: Statistics Canada, CANSIM, matrix 3776.

14.7 Provincial and Territorial Government Revenues and Expenditures, 1996–97<sup>1</sup>

	Nfld.	P.E.I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Y. T.	N.W.T.
\$ millions												
<b>Revenues</b>	<b>3,747</b>	<b>841</b>	<b>5,000</b>	<b>4,899</b>	<b>43,415</b>	<b>55,493</b>	<b>7,146</b>	<b>6,208</b>	<b>17,518</b>	<b>24,396</b>	<b>475</b>	<b>1,355</b>
Own source revenue	2,188	549	3,099	3,384	35,838	49,193	5,325	5,380	16,124	22,347	113	288
Income taxes	696	151	1,081	1,066	15,446	21,690	1,711	1,549	4,850	6,831	44	102
Personal income taxes	618	130	956	830	13,602	17,483	1,458	1,277	3,443	5,360	34	77
Corporation income taxes	78	21	126	236	1,844	4,207	253	272	1,407	1,471	10	26
Consumption taxes	891	205	1,290	1,106	8,595	15,177	1,506	1,370	1,968	5,279	23	50
Property and related taxes	9	41	15	239	1,417	1,590	333	243	1,216	2,037	3	7
General property taxes	3	39	—	228	—	7	216	1	1,180	1,324	3	7
Capital taxes	6	2	15	9	1,417	1,155	109	242	36	398	—	—
Other property and related taxes	—	—	—	3	—	428	9	—	—	315	—	—
General payroll taxes	72	—	—	—	3,754	2,758	209	—	—	—	—	—
Miscellaneous taxes	76	21	108	116	1,920	1,763	196	353	605	588	5	5
Contributions to Social Security Plans	108	16	153	95	1,684	2,610	160	154	371	1,048	7	25
Health and drug insurance premiums	—	—	11	—	—	—	—	—	620	868	—	—
Sales of goods and services	96	51	118	118	885	1,355	173	250	546	554	11	59
Return on investments	227	64	317	631	1,994	2,054	1,020	1,443	5,882	5,001	20	38
Other revenue from own sources	13	1	6	12	144	196	15	19	65	140	1	1
Transfers from other levels of government	1,559	291	1,900	1,515	7,577	6,300	1,822	827	1,395	2,049	362	1,067
<b>Expenditures</b>	<b>3,692</b>	<b>847</b>	<b>5,007</b>	<b>4,817</b>	<b>47,934</b>	<b>59,709</b>	<b>7,041</b>	<b>6,068</b>	<b>15,182</b>	<b>24,536</b>	<b>512</b>	<b>1,382</b>
General services	55	29	74	90	1,017	533	131	91	183	325	35	87
Protection of persons and property	151	28	151	148	1,387	2,363	267	227	427	1,000	37	80
Transportation and communications	272	80	272	421	1,777	2,918	253	255	684	1,333	94	119
Health	853	177	1,381	1,177	10,628	18,116	1,953	1,464	3,920	7,365	82	201
Social services	537	123	678	567	10,015	12,180	1,069	957	2,127	4,075	52	146
Education	771	166	1,022	986	10,497	8,708	1,141	900	3,850	5,771	102	290
Resource conservation and industrial development	121	75	232	198	1,890	1,110	215	564	1,124	1,230	38	138
Environment	72	13	38	66	653	477	59	60	267	283	6	7
Recreation and culture	30	9	37	36	571	500	114	66	187	95	12	41
Labour, employment and immigration	25	5	5	40	570	145	13	14	33	28	1	4
Housing	48	4	97	47	318	1,664	97	52	132	91	16	171
Regional planning and development	10	—	30	52	154	231	83	25	24	97	16	47
Research establishments	—	—	7	—	258	47	9	8	69	20	—	—
General purpose transfers to other levels of government	44	5	33	139	565	919	162	89	221	116	16	44
Debt charges	704	134	951	849	7,636	9,801	1,476	1,298	1,935	2,708	4	7
<b>Surplus or (deficit)</b>	<b>56</b>	<b>(7)</b>	<b>(8)</b>	<b>82</b>	<b>(4,519)</b>	<b>(4,216)</b>	<b>106</b>	<b>140</b>	<b>2,337</b>	<b>(140)</b>	<b>(38)</b>	<b>(27)</b>

1. From April 1 to March 31.

Source: Statistics Canada, CANSIM, matrices 3777 to 3788.



14.8 Local Government Revenues and Expenditures<sup>1</sup>

	1988	1989	1990	1991	1992	1993	1994	1995	1996
	\$ thousands								
<b>Revenues</b>	<b>27,145,593</b>	<b>29,921,824</b>	<b>32,643,337</b>	<b>34,960,075</b>	<b>37,313,812</b>	<b>38,010,634</b>	<b>39,299,101</b>	<b>40,386,356</b>	<b>38,902,975</b>
Own source revenue	20,917,422	23,230,275	25,100,065	26,270,406	27,609,032	28,345,404	29,295,764	29,925,053	30,003,875
Property and related taxes	13,187,128	14,442,112	15,601,333	16,806,435	17,936,420	18,463,446	19,052,731	19,216,453	19,305,752
Real property taxes	8,794,034	9,693,550	10,606,371	11,590,761	12,773,803	13,214,042	13,612,605	13,931,572	14,149,457
Other property taxes	4,393,094	4,748,562	4,994,962	5,215,674	5,162,617	5,249,404	5,440,126	5,284,881	5,156,295
Miscellaneous taxes	384,261	441,989	402,441	395,089	410,712	383,567	424,698	418,129	434,164
General sales taxes	33,675	41,235	42,509	41,623	41,164	44,024	46,796	48,260	50,531
Amusement taxes	31,831	33,642	31,991	29,426	19,752	3,179	3,259	2,846	3,169
Licenses and permits	309,323	357,660	315,995	310,944	337,107	322,722	361,187	353,559	366,196
Other taxes	9,432	9,452	11,946	13,096	12,689	13,642	13,456	13,464	14,268
Sales of goods and services	5,426,266	5,970,345	6,476,354	6,619,034	6,900,550	7,068,528	7,389,556	7,796,600	7,911,428
Concessions and franchises	54,861	55,961	58,225	54,258	56,649	65,499	62,683	61,425	76,172
Other sales revenue	5,371,405	5,914,384	6,418,129	6,564,776	6,843,901	7,003,029	7,326,873	7,735,175	7,835,256
Return on investments	1,628,000	2,049,677	2,281,773	2,094,570	1,988,056	2,020,130	1,988,008	2,067,157	1,931,099
Other revenue from own sources	291,767	326,152	338,164	355,278	373,294	409,733	440,771	426,714	421,432
Transfers from other levels of government	6,228,171	6,691,549	7,543,272	8,689,669	9,704,780	9,665,230	10,003,337	10,461,303	8,899,100
<b>Expenditures</b>	<b>27,741,994</b>	<b>30,490,105</b>	<b>34,158,001</b>	<b>36,538,751</b>	<b>38,253,519</b>	<b>38,128,562</b>	<b>39,692,977</b>	<b>41,163,224</b>	<b>39,252,220</b>
General services	2,748,748	3,110,817	3,396,351	3,734,926	3,751,067	3,621,584	3,730,956	3,939,968	3,894,544
Protection of persons and property	4,121,450	4,507,494	4,974,684	5,379,143	5,625,165	5,769,917	5,854,368	6,052,557	6,187,726
Transportation and communications	6,197,079	6,778,705	7,428,943	7,364,948	7,603,564	7,703,328	7,995,615	8,408,509	7,811,415
Health	560,395	649,694	708,909	733,081	804,429	742,603	764,227	797,933	740,213
Social services	2,053,436	2,308,806	2,892,795	4,119,790	4,860,749	5,364,962	5,398,172	5,189,825	4,396,284
Education	21,428	15,903	18,937	18,066	16,121	13,072	12,087	10,222	11,836
Resource conservation and industrial development	585,073	723,863	781,842	795,391	765,319	744,808	823,767	878,498	826,494
Environment	4,064,104	4,614,152	5,288,455	5,303,036	5,560,787	5,294,140	5,915,140	6,313,778	6,101,777
Recreation and culture	3,240,523	3,673,789	4,135,384	4,237,428	4,453,275	4,321,148	4,489,313	4,831,907	4,767,106
Housing	488,987	545,183	647,330	777,657	735,781	605,495	636,133	616,218	625,134
Regional planning and development	571,979	614,049	753,252	693,106	701,830	604,533	636,991	685,672	625,853
Debt charges	2,656,787	2,761,241	2,940,496	3,083,493	3,220,211	3,222,591	3,203,726	3,189,348	3,108,905
Other expenditures	432,005	186,409	190,623	298,686	155,221	120,381	232,482	248,789	154,933
<b>Surplus or (deficit)</b>	<b>(596,401)</b>	<b>(568,281)</b>	<b>(1,514,664)</b>	<b>(1,578,676)</b>	<b>(939,707)</b>	<b>(117,928)</b>	<b>(393,876)</b>	<b>(776,868)</b>	<b>(349,245)</b>

1. From January 1 to December 31.

Source: Statistics Canada, CANSIM, matrix 7093.

**14.9 Consolidated Assets, Liabilities and Net Debt of Public Administrations<sup>1</sup>**

	1990	1991	1992	1993	1994
	\$ millions				
<b>Assets</b>	<b>151,227</b>	<b>164,467</b>	<b>165,839</b>	<b>170,550</b>	<b>176,488</b>
Cash on hand and on deposit	21,934	27,997	24,694	26,924	28,808
Receivables	14,820	17,337	19,115	20,096	23,847
Advances	50,225	55,180	54,843	53,310	57,837
Securities	56,629	55,779	60,113	62,084	58,061
Other financial assets	7,619	8,174	7,074	8,136	7,935
<b>Liabilities</b>	<b>601,741</b>	<b>655,952</b>	<b>718,207</b>	<b>793,918</b>	<b>869,911</b>
Bank overdrafts	7,291	8,665	7,221	8,278	6,050
Payables	37,165	37,940	38,969	39,999	52,557
Advances	10,083	11,503	12,288	12,251	13,510
Treasury bills	113,702	134,656	149,891	159,759	161,790
Savings bonds	44,121	37,454	39,078	39,719	37,576
Bonds and debentures	261,243	288,553	322,822	372,969	420,078
Other securities	22,177	21,516	22,526	28,786	35,530
Deposits	13,598	15,912	18,076	17,084	19,409
Other liabilities	92,361	99,753	107,336	115,073	123,411
<b>Net debt</b>	<b>(450,514)</b>	<b>(491,485)</b>	<b>(552,368)</b>	<b>(623,368)</b>	<b>(693,423)</b>

1. Data for the federal, provincial and territorial governments are as at March 31. The local governments' data are as at December 31 of the previous year.

Source: Statistics Canada, CANSIM, matrix 3254.

**14.10 Federal Government Debt<sup>1</sup>**

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	\$ millions											
<b>Gross federal debt</b>	<b>284,038</b>	<b>318,277</b>	<b>349,894</b>	<b>379,993</b>	<b>406,606</b>	<b>444,558</b>	<b>476,104</b>	<b>514,357</b>	<b>557,604</b>	<b>595,877</b>	<b>634,939</b>	<b>651,240</b>
Total unmatured debt	201,518	229,492	252,058	277,625	295,985	325,212	352,905	383,798	414,942	441,991	470,581	477,940
Marketable securities	156,828	183,386	196,243	226,863	251,983	287,276	313,806	345,924	380,113	407,117	435,675	440,979
Marketable bonds	86,957	100,294	110,222	121,121	131,810	147,104	161,499	181,322	208,464	233,621	262,279	295,022
Treasury bills	61,950	76,950	81,050	102,700	118,550	139,150	152,300	162,050	166,000	164,450	166,100	135,400
Other marketable securities	7,921	6,142	4,971	3,042	1,623	1,022	7	2,552	5,649	9,046	7,296	10,557
Non-marketable securities	91,660	98,075	113,203	113,975	113,599	114,043	120,980	125,785	128,926	135,907	142,788	151,165
Canada Savings Bonds	44,245	44,310	53,323	47,756	40,929	34,444	35,598	34,369	31,331	31,386	31,428	33,493
Bonds issued to the Canada Pension Plan	445	1,796	2,492	3,006	3,073	3,492	3,501	3,505	3,498	3,488	3,478	3,468
Superannuation funds	46,970	51,969	57,388	63,213	69,597	76,107	81,881	87,911	94,097	101,033	107,882	114,204
Dominion notes	1,437	1,491	1,670	1,771	2,132	2,244	2,295	2,374	2,464	2,570	2,805	3,243
Other federal debt	34,113	35,325	38,778	37,384	38,892	40,995	39,023	40,274	46,101	50,283	53,671	55,853
Debt payable in foreign currencies	13,811	12,010	11,294	8,415	5,751	4,526	3,444	5,409	10,668	16,921	16,809	23,016
<b>Net federal debt</b>	<b>245,151</b>	<b>276,735</b>	<b>305,438</b>	<b>333,519</b>	<b>362,920</b>	<b>395,071</b>	<b>428,682</b>	<b>470,046</b>	<b>513,219</b>	<b>550,685</b>	<b>578,718</b>	<b>588,465</b>

1. from April 1 to March 31.

Source: Statistics Canada, CANSIM, matrix 3199.

**14.11 Employment, Public Administration**

	1994	1995	1996	1997
	Employees <sup>1</sup> (thousands)			
<b>Public administration</b>	<b>728.6</b>	<b>713.9</b>	<b>693.6</b>	<b>674.3</b>
Federal administration <sup>2</sup>	264.7	252.0	242.3	223.9
Provincial administration	225.2	223.0	209.3	202.8
Local administration	238.8	238.9	242.0	247.6
<b>All industries<sup>3</sup></b>	<b>10,650.9</b>	<b>10,876.4</b>	<b>10,967.2</b>	<b>11,299.0</b>

1. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T-4 is not required.

2. Excluding the military.

3. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72Fo002.

**14.12 Earnings, Public Administration**

	1994	1995	1996	1997
	Average weekly earnings <sup>1 2</sup>			
	\$			
<b>Public administration</b>	<b>752.06</b>	<b>750.65</b>	<b>740.05</b>	<b>739.57</b>
Federal administration <sup>3</sup>	811.50	811.63	799.60	803.06
Provincial administration	726.15	727.61	733.22	745.90
Local administration	710.59	707.80	686.35	676.98
<b>All industries<sup>4</sup></b>	<b>568.27</b>	<b>573.75</b>	<b>586.06</b>	<b>598.26</b>

1. Includes overtime.

2. Excludes owners or partners of unincorporated business and professional practices, self-employed persons, unpaid family workers, persons working outside Canada, military personnel and casual workers for whom a T-4 is not required.

3. Excludes the military.

4. Excludes agriculture, fishing and trapping, private household services, religious organizations and the military.

Source: Statistics Canada, Catalogue no. 72Fo002.

## 14.13 Military Personnel

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Annual average number of employees												
<b>Canada</b>	<b>111,712</b>	<b>113,401</b>	<b>114,609</b>	<b>117,336</b>	<b>118,782</b>	<b>121,411</b>	<b>117,473</b>	<b>113,192</b>	<b>108,807</b>	<b>99,876</b>	<b>93,733</b>	<b>94,254</b>
Newfoundland	1,780	1,870	1,969	2,088	2,201	2,350	2,438	2,464	2,369	2,047	1,887	1,810
Prince Edward Island	1,196	1,203	1,200	1,197	1,048	743	368	337	332	297	296	328
Nova Scotia	15,074	14,961	15,128	15,137	15,144	15,389	14,926	15,135	14,865	13,425	12,671	12,568
New Brunswick	5,790	5,950	5,906	5,852	5,884	6,042	5,945	5,895	5,773	5,510	5,149	5,093
Quebec	17,430	17,861	17,899	18,368	18,844	19,723	19,079	19,151	19,077	17,618	16,979	17,882
Ontario	32,827	33,553	34,109	35,718	36,215	37,316	36,990	36,150	35,211	32,508	30,338	30,326
Manitoba	5,573	5,457	5,470	5,307	5,417	5,531	5,247	5,252	5,059	5,142	4,703	4,551
Saskatchewan	2,331	2,216	2,156	2,266	2,316	2,465	2,468	2,395	2,315	2,102	1,933	1,961
Alberta	9,783	10,035	9,991	10,214	10,482	10,980	10,939	10,910	10,840	9,447	9,105	9,533
British Columbia	10,968	11,239	11,381	11,486	11,459	11,646	11,665	11,202	10,754	9,965	9,014	8,605
Yukon Territory	16	15	12	11	9	3	17	18	12	23	22	23
Northwest Territories	199	96	79	76	71	77	77	80	83	92	91	90
Outside Canada	8,744	8,947	9,311	9,617	9,693	9,147	7,315	4,205	2,115	1,701	1,546	1,485
Annual total of wages and salaries												
\$ thousands												
<b>Canada</b>	<b>2,727,558</b>	<b>2,907,605</b>	<b>3,061,819</b>	<b>3,311,496</b>	<b>3,578,054</b>	<b>3,620,080</b>	<b>3,640,516</b>	<b>3,548,584</b>	<b>3,431,331</b>	<b>3,217,432</b>	<b>3,015,452</b>	<b>2,888,291</b>
Newfoundland	31,292	35,094	38,647	43,797	48,779	50,774	55,105	56,796	60,401	58,877	53,354	51,098
Prince Edward Island	29,617	31,026	31,666	33,447	30,114	17,629	2,455	1,431	2,559	3,003	2,949	2,820
Nova Scotia	401,837	421,277	438,977	468,967	501,122	510,725	531,804	548,803	533,784	502,126	484,127	463,659
New Brunswick	128,043	138,886	142,072	144,377	153,092	152,454	155,569	157,991	163,637	162,305	153,436	146,911
Quebec	324,468	354,352	363,504	395,298	432,684	440,639	440,960	460,394	477,431	444,665	433,677	415,407
Ontario	805,201	866,907	938,566	1,048,473	1,112,912	1,129,622	1,181,105	1,158,598	1,147,001	1,085,587	983,100	941,983
Manitoba	146,349	154,132	157,127	172,216	181,872	165,707	163,690	166,987	168,236	172,939	170,791	163,536
Saskatchewan	47,397	45,082	44,299	47,446	51,257	57,945	60,825	62,523	60,633	56,628	51,153	48,974
Alberta	235,444	252,740	264,782	284,713	312,477	334,115	348,813	363,973	366,825	316,407	306,830	293,769
British Columbia	263,437	283,189	296,082	318,319	337,841	342,992	349,826	338,823	332,358	321,542	292,379	279,952
Yukon Territory	393	377	308	304	281	93	531	574	367	744	722	690
Northwest Territories	7,732	4,398	4,431	4,818	5,127	5,377	5,728	5,880	6,734	6,953	6,933	6,639
Outside Canada	306,359	320,150	341,356	349,327	410,504	412,009	344,104	225,812	111,359	85,653	76,002	72,855

Source: Statistics Canada, CANSIM, matrix 2720.



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## *The Legal System*

### **C h a p t e r**

*If Canada's degree of civility were to be measured in reams alone, Canadian law would already have much to commend itself.*

*There are no fewer than 600 public federal statutes in force in Canada today comprising tens of thousands of pages. Governing subjects as diverse as the activities of lobbyists and the standards of purity of precious metals, these statutes also vary greatly in scope, from the National Symbol of Canada Act which, in less than*

**Fifteen**



100 words, identifies the beaver as a symbol of the sovereignty of Canada, to the nearly 2,000-page compendium of the Income Tax Act, whose regulations and rules are amended so often that they are republished annually in book form.

Every year, federal Parliament, provincial legislatures, municipal councils and their agencies add thousands of new statutes, ordinances, rules and regulations to the plethora of laws which ensure justice for all Canadians.

Rules help maintain a level of decorum and fairness befitting a civil society. Laws strike a balance among the rights and liberties of individuals, groups and institutions in society, including government itself. Our governments, courts and police—the makers, interpreters and enforcers of

our civil and criminal laws—are dedicated to upholding the fundamental values of Canadian society, while at the same time addressing the needs of a continually changing country. This ability to reconcile competing political and economic facts has given our legal system the power to be a civilizing force in Canada.

## JUSTICE SPENDING

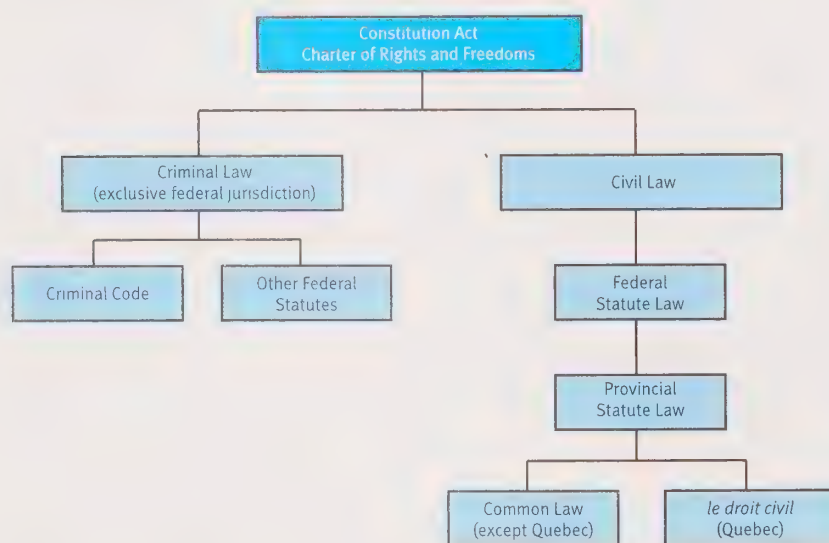
The life of the law is in its enforcement. To give life to criminal law alone, in 1994–95, Canadian governments spent \$5.8 billion on policing, \$1.7 billion on courts, legal aid and prosecutions and a further \$2.4 billion on youth and adult correctional services.

Spending on policing, courts and correctional services amounted to roughly three cents of every dollar spent by governments in Canada, or \$340 for every Canadian. These expenses, however, do not include capital expenditures (such as for building prisons), justice policy research, victim compensation, or funding for non-government organizations. Nor do they include funds spent privately to hire lawyers or public money used to administer non-criminal law.

Expenditures on total justice services rose from just over \$7 billion in 1988–89, to \$10 billion in 1994–95, an increase of nearly 39%. However, when population growth and inflation are taken into account, the real increase in per capita expenditures was only 7%.

On the other hand, the National Crime Prevention Council has estimated that the true cost of crime may be much higher. Using a formula that goes beyond the cost of policing, courts and prison, it looked at the cost of unreported crime, the cost of property damage and insurance pay-outs, health care and hospitalization, voluntary care-givers long-term costs, the installations of private security systems and other cautionary measures taken to prevent victimization. Considering the consequences, the Council's bill for the cost of crime in 1996 was an estimated \$46 billion.

Canada's Legal System



Like other areas of government, justice services have had to make do with less. Many departments and agencies have now introduced cost-saving measures, including the diverting of cases from the formal court process and double-bunking adult inmates in prisons. Overall, there is an increased emphasis on crime prevention and cost-cutting.

## CRIME

When we think of crime, we usually think of violent crimes. These are the ones that make the newspaper headlines, leading many of us to believe that crime has increased in our communities. But if we look beyond the headlines, we see that this is simply not the case. In 1996, Canada's crime rate actually dropped 1.6% from the previous year, to a total of 2.6 million offences under the Criminal Code (excluding traffic offences). In fact, the 1996 overall crime rate of about 8,800 per 100,000 population was almost the same as it was in the mid-1980s and roughly 15% lower than it was in 1991.

It bears noting that total crime rates have also been falling steadily in the United States, England and Wales since about 1993, so the trend is not unique to Canada. According to the United Nations Crime Survey, Canada's crime rate was the fourth highest among nine industrialized countries, not including the United States, which places us just about in the middle of the pack. In another survey of 10 western industrialized countries, 25% of the adult population in Canada reported being victimized in the previous year, which again means that we're about average.

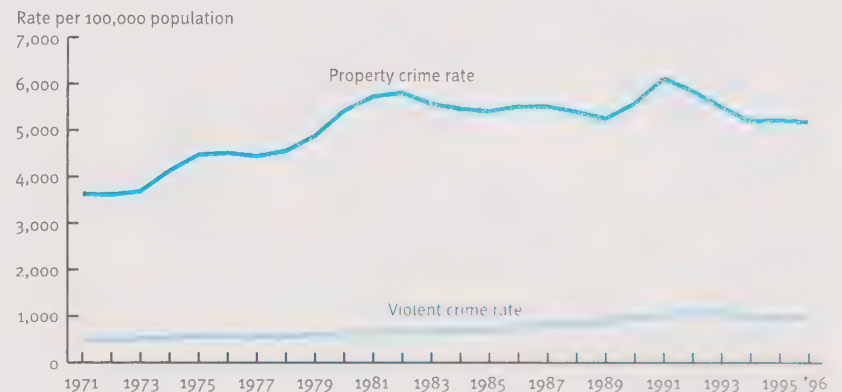
We also seem to be quite satisfied with the work of our police. In 1996, about 80% of us said that we thought the police were doing a good job controlling crime. The Dutch, on the other hand, who had the highest victimization rate, ranked their police force much lower—only 45% of the population felt the police were doing a good job.

## Violent Crime

In 1996, the violent-crime rate in Canada actually declined 1%, and this was the fourth year in a row of such decline. Prior to this downward trend, the violent-crime rate had been increasing for more than a decade. Largely, this was a consequence of the growth in the rate of common assault (categorized as a level 1 crime), the least serious form of assault. In 1996, about 6 in 10 of the 297,000 violent crimes reported to police were common assaults, an extraordinary 40% increase since 1986.

Although Canada's homicide rate is higher than some European countries, it remains roughly one-quarter of the U.S. homicide rate and, according to International Criminal Police Organization figures for 1990, Canada's murder rate ranked 32nd among 65 countries.

### Property crimes more common than violent crimes



Source: Statistics Canada, Catalogue no. 85-002-XPE.





*Photo by George Webber*

**Arrest of a young suspect in Calgary.**

In the early 1960s, the national homicide rate in Canada was less than 1.5 per 100,000 people. In 1966, it began steadily increasing, reaching a peak of more than 3 per 100,000 in 1975. Since then, it has declined to 2.1 per 100,000 Canadians, or 635 homicides in 1996. This is actually fewer than the number of homicides reported in some American cities. To further place our homicide rate in perspective, Canadians are 180 times more likely to die of either heart disease or cancer than homicide.

Consistent with the trend since 1979, guns were used in a third of all homicides in 1996. Since 1991, handguns have replaced rifles and shotguns as the most commonly used firearm, and they account for half of all firearm homicides. While firearms were the most common weapon used in homicides in 1996, stabbings accounted for nearly as many (31%), followed by beatings (22%), strangulation or suffocation (9%) and fire and poisoning (1% each).

Homicides continue to be committed primarily by persons known to the victim. In 1996, nearly half (49%) of victims were killed by an acquaintance and a further 37% were killed by a spouse or other family member. Strangers were responsible for only 14% of homicides.

Fully one-quarter of all homicides in 1996 occurred during the enactment of another criminal offence, most commonly an assault or robbery. A further 10% of homicides were reported by the police to be drug-related.

## Firearms

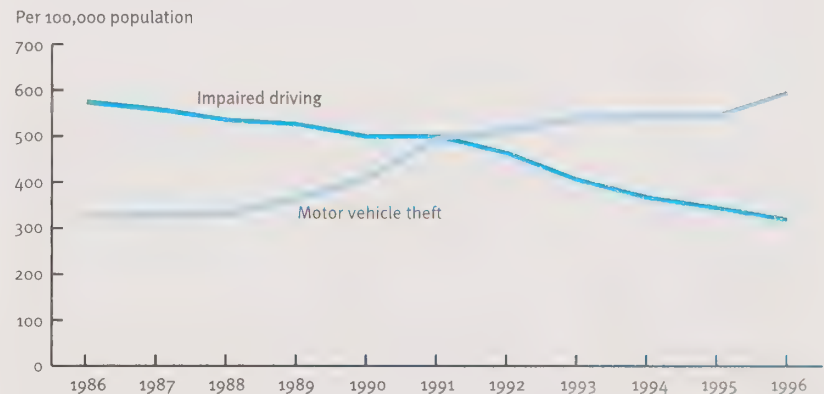
Although there are approximately 200 homicides each year involving firearms, homicides account for a relatively small proportion of all firearm-related deaths. Of the 1,125 gun-related deaths in Canada in 1995, the largest number was due to suicide (81%), followed by homicide (13%), accidents (4%) and other incidents (2%).

Over the years, Canada has adopted a number of legislative measures aimed at reducing firearm deaths and injury. In 1977, Parliament amended the Criminal Code, requiring individuals to obtain a Firearms Acquisition Certificate (FAC) before acquiring a firearm. The legislation also introduced provisions to regulate the storage and display of weapons for businesses and gun collectors, and mandatory minimum sentences to deter the criminal use of firearms.

In 1991, the legislation was amended again by Parliament to strengthen the screening of ownership, and a mandatory 28-day waiting period for successful applicants was added to the process. Under this legislation, all owners of firearms must comply with provisions for safe storage, handling, display and transportation of firearms.

In 1995, Parliament passed a new Firearms Act and amended the Criminal Code once again. Under this newest firearms legislation, all

### Changing crime rates



Source: Statistics Canada, Catalogue no. 85-205-XPE.



owners and users will be required to have an FAC firearms licence and all firearms will have to be registered. In addition, strict new penalties have been implemented for firearms smuggling and trafficking, and tougher mandatory minimum sentences have been introduced for a number of offences involving firearms.

### Auto Theft

Between 1988 and 1996, the rate of motor vehicle thefts in Canada almost doubled. In 1996, motor vehicle theft accounted for more than one in 10 property crimes, involving more than 180,000 incidents. Despite these growing numbers, the rate in Canada (for every 1,000 owners) was 18% lower than that in the United States and 45% lower than in England.

In 1996, police identified an accused person in only 12% of motor vehicle thefts. Nearly half (43%) of those caught and charged with vehicle theft were aged 12 to 17.



Photo by W.W. Wrathall, National Archives of Canada, PA-95719

A robbed Union Bank of Canada, New Hazelton, British Columbia, 1914.

### Impaired Driving

In Canada, the number of impaired driving charges has been dropping steadily since 1986. However, drinking and driving remains a serious problem, accounting for more than 96,000 criminal incidents in 1996. From 1987 to 1996, the rate of impaired driving offences dropped 46%. According to one study, however, the number of fatally-injured impaired drivers declined 23% between 1987 and 1995.

Driving under the influence is still predominantly a male crime. In 1996, almost 90% of those charged were men. Contrary to popular belief, however, the worst offenders are not young drivers. In 1996, those most frequently charged were men between the ages of 25 and 44; they accounted for more than 60% of all people charged with impaired driving, whereas they made up only 20% of the driver-aged population of Canada.

### Prostitution

Since 1985, prostitution—the exchange of sex for money—has been legal in Canada. It is, however, illegal for buyers or sellers to communicate in a public place to arrange the transaction of sexual services. In 1996, the federal government introduced new penalties related to child prostitution. This legislation was unique in its efforts to govern Canadians who violate its provisions while vacationing abroad.

It is difficult to get a true sense of the level of prostitution activity in Canada. Police reporting practices vary; they may be driven by periodic public complaints, or by media coverage. Police enforcement and prosecution of criminal prohibitions on “communicating” appear to be fairly even-handed along gender lines. For instance, men, mainly as clients, accounted for slightly more than half (56%) of all prostitution-related convictions. On the other hand, a much larger proportion of convicted women (39%) received jail sentences than was the case for convicted men (3%).

## Sentencing

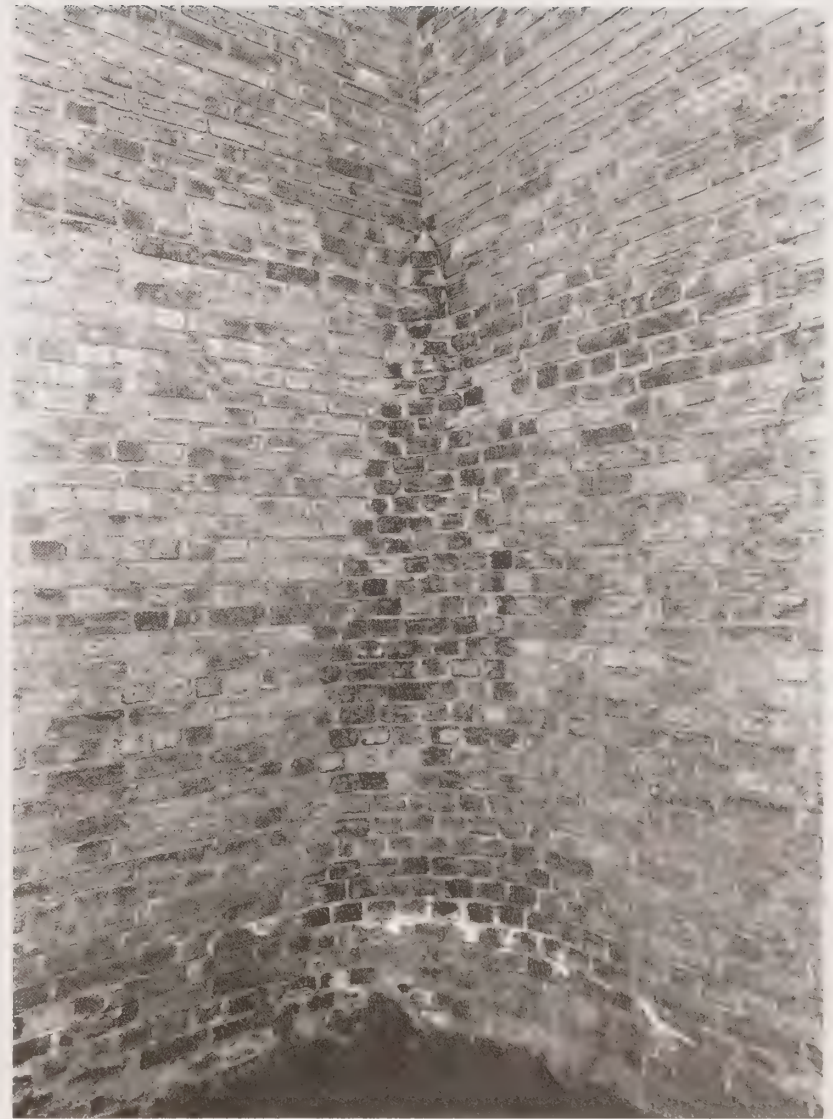
The principle of proportionality requires that more serious crimes be punished by more severe sentences. For example, more than 80% of people convicted of robbery (theft using force) were imprisoned in 1996–97, while only 17% of those convicted of causing a disturbance went to jail.

However, sentences imposed for the same crimes often differ considerably depending on a complex variety of factors. These include such things as criminal history, the impact on the victim, the likelihood of rehabilitation and the availability of local alternatives to a jail term. For example, 78% of the people convicted of impaired driving in Prince Edward Island in 1996–97 were imprisoned, while only 8% of impaired drivers in Nova Scotia went to jail.

High incarceration rates and disparities in sentences imposed for similar offences have long been a concern in Canada. In 1996, Parliament enacted a law codifying a set of sentencing principles to act as a guide for judges so as to reduce disparities. The resulting amendments to the Criminal Code set out a list of important mitigating factors that judges must consider in each case.

## Corrections

On an average day in 1996–97, Canada's prisons and penitentiaries housed 34,200 inmates and in an average month, more than 117,000 people were on conditional release from a correctional facility. The number of adults behind bars or on some form of community supervision fell for the third straight year in 1996–97, after nearly a decade of growth. There were 108,000 “sentenced” admissions to provincial and territorial facilities for terms of less than two years. Of those serving sentences in Canadian provincial prisons, 24% were in for failing to pay a fine. In the same year, there were nearly 4,600 offenders admitted to federal institutions to serve



*Photo by Francis Sanagan, Canadian Museum of Contemporary Photography*

**Rounded yard corner in prison, Stratford, Ontario.**



sentences of two years or more. Just 5%, or 210 of those admitted to federal penitentiaries, were sentenced to life terms.

In 1995, Canada's rate of incarceration for adults was 115 per 100,000, which is slightly higher than the rate in England and Wales (at 100), France (95) and Germany (90). However, Russia and the United States imprisoned a much higher proportion of its population at 690 and 600 inmates per

100,000, respectively. A disturbing fact about Canada's prison population is the disproportionate number of Aboriginal inmates. While Aboriginal people compose just 3% of the general population, they accounted for 15% of federal prison admissions and 16% of all provincial and territorial admissions in 1996-97.



*Photo by Pierre Gaudard, Canadian Museum of Contemporary Photography*

**Reception centre (maximum security), Ste-Anne-des-Plaines, Quebec.**

## Young Offenders

Public opinion surveys, media reports and anecdotal accounts reflect a widespread view that youth violence is on the rise and that youth court judges are too lenient in sentencing.

In 1996, more than half of charges against youths (aged 12 to 17) were for property crimes and about 19% for violent crimes. Although the rate of youths charged with violent offences more than doubled between 1986 and 1995, adults are more likely to be charged with these crimes than are youths.

Still, youths and adults convicted of criminal offences are equally likely to be imprisoned. About one-third of youth and adult offenders were sentenced to custody or prison in 1995–96, though more than half of young offenders served their custody sentences in open custody facilities in the community.

In 1997, the House of Commons Standing Committee on Justice and Legal Affairs completed a comprehensive review of the youth justice system and found, among other things, that harsher sentences and experiments with youth offender boot camps did not discourage offenders. It recommended that more of the system's resources be devoted to community-based support and crime prevention strategies, and that alternatives to sentencing be further developed.

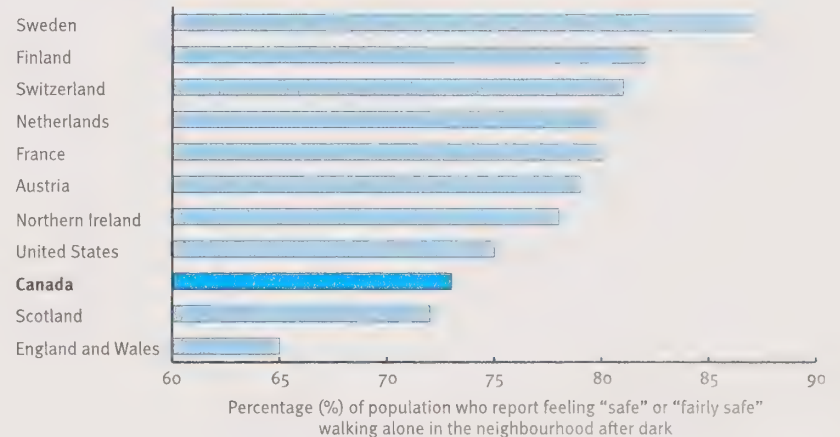
Increasingly, programs are aimed at the prevention of crime among youth. For example, the Government of Saskatchewan has a province-wide plan called "Family and Youth." It put this plan, which includes conflict resolution, counselling and youth day programs, in place after realizing that it was spending about 80% of its youth crime resources on only 20% of the youth who were in conflict with the law.

## The Law of Cyberspace

The late Supreme Court Justice John Sopinka warned that existing Canadian laws dealing with defamation, pornography and privacy must adapt to include wrongdoers who can conceal their identity on the Internet. For example, encryption codes are used to protect the privacy of computer users, but they also serve to protect the anonymity of people involved in criminal activity, such as those using the Net to make plans to commit a crime, those harassing others via electronic mail, and those electronically distributing child pornography, to name but a few.

As more personal information is being stored in government and private sector computer files (which can, in turn, be transmitted through

### Feelings of safety



Source: Statistics Canada, Catalogue no. 85-002-XPE.

## *T h i s   i s   t h e   L a w*

*Law-makers have always had their hands on the levers of power in society. Canadians can, therefore, be excused for occasionally poking fun at the sometimes wacky laws that law-makers put on the books or let stay there too long.*

*In 1971, CBC Television made law bashing a prime-time pastime when it launched a tongue-in-cheek game show called “This is the Law.” Panellists, after watching comedy sketches, were required to guess what law was being violated as the police carted away the “villain.”*

*When “This is The Law” aired in the 1970s, there were ample examples of loony laws worldwide to keep the program stocked with fresh material and the panellists guessing. Some of these laws are still on the books today, including the following:*

- As per Section 365 of the Criminal Code, it is an offence to fraudulently practise witchcraft or tell fortunes. Doing either with no “intent to deceive” is, it seems, okay.*

- An Ontario innkeeper who acts reasonably is not liable to pay more than \$40 for a guest's property that is lost, stolen or damaged while he or she stays at the hotel. The \$40 maximum does not apply if the property in question is a horse, a saddle or a carriage.*
- Section 264.1 of the Criminal Code states that anyone who threatens to injure a pet bird or animal may be imprisoned for up to two years.*



- *Duelling is illegal in Canada under section 71 of the Criminal Code. Anyone found challenging, accepting a challenge or provoking a challenge to a duel can be sent to jail for up to two years. The law is silent on jousting, per se.*
- *In British Columbia, the Hairdressers Act forbids advertising the price of haircuts. The same act, however, authorizes the provincial hairdressers' association,*

*subject to government approval, to make rules setting minimum prices for "various acts of hairdressing." It would seem that, in British Columbia, the rule might be: "shave and a haircut, minimum two bits. . . but don't tell anyone!"*

- *Although the Queen no longer plays a substantive role in our law-making system, she still is very near and dear to*

*the heart of our laws. Section 49 of the Criminal Code states that anyone who, in the presence of the Queen, does anything to "alarm Her Majesty" can be locked up for 14 years.*

- *Section 143 of the Criminal Code says that anyone who advertises a reward, "no questions asked," for the return of anything lost or stolen is guilty of an offence punishable by a maximum of six months imprisonment and a \$2,000 fine.*





*Work by Nicholas Hornyansky, National Gallery of Canada*

**Osgoode Hall, Toronto (home to the Law Society of Upper Canada)**

the Internet), concerns about personal privacy are growing. Laws enacted by federal and provincial governments (and, in criminal court proceedings, section 8 of the Charter of Rights and Freedoms) give publicly held personal information some privacy protection. Only Quebec has comprehensive legislation safeguarding information held by the private sector.

Another concern is that the Internet allows some kinds of crimes to continue without legal recourse. For example, people posting obscene or otherwise illegal material from abroad cannot be prosecuted by Canadian domestic laws. The Criminal Code states that no one can be convicted of an offence in Canada, with few exceptions, if the offence is committed outside Canada. Like other countries, our laws only apply within our borders.

### **DNA Breakthroughs**

The identification of DNA (deoxyribonucleic acid) has been, undoubtedly, one of this century's biggest breakthroughs in police investigation procedures. Chemical analysis of DNA, from any cell in a person's body, (including blood, hair, and skin) reveals a unique kind of genetic code that can be used to identify a person with much greater certainty than dental records or fingerprints.

Between 1993 and 1997, there were 12 Canadian prisoners released from custody on the strength of DNA evidence. Notably, DNA was used to vindicate David Milgaard in 1997 and Guy Paul Morin in 1995, long after they had been wrongly convicted in their high profile murder trials in 1969 and 1992, respectively. In 1995, federal laboratories in Canada handled DNA evidence in the prosecution of 722 murders and 1,289 assaults.

## CANADA'S CONSTITUTION

The Constitution is the supreme law of Canada. It establishes the basic organizational framework of government and the limits on government powers. The Constitution overrides laws that are inconsistent with its principles—either because they violate individual rights and freedoms or because they run afoul of the constitutional division of powers between the federal and provincial governments. Unconstitutional laws must be interpreted in a way that makes them consistent with the Constitution or they will be deemed to be invalid—to the extent of the inconsistency—by the court.

Canada's constitution is actually a collection of more than 30 statutes. The most important two sources of constitutional law are the Constitution Act, 1867 (the revised title of the British North America Act, 1867), which sets out the division of powers between the federal and provincial governments, and the Constitution Act, 1982 (which includes the Canadian Charter of Rights and Freedoms), which sets out limits on the ability of governments to infringe on specified rights and freedoms of Canadians.

Unwritten laws, called constitutional conventions, also form part of the Constitution. For example, the status of the prime minister as the operating head of our federal government is not specifically mentioned anywhere in the text of the Constitution, though the position of the prime minister is secure. Similarly, the status of the Supreme Court of Canada as the highest court of appeal is set out in a mere statute which is, theoretically, subject to repeal by any sitting Parliament; however, constitutional conventions would likely require that a constitutional amendment be passed to dissolve the Supreme Court.

Although Canada has operated as a democracy since 1867, it only gained its constitutional independence from Britain in 1982. In this respect, Canada is not alone. Iceland, whose *Althing* (Parliament) traces its origins to 1024 AD, did not become a republic until 1944, and Greece,

whose experiments with democratic government of city-states date back to the fifth century BC, did not abolish its monarchy until 1969. Although Canada remains, in a ceremonial way, a constitutional monarchy, the repatriation of our constitution in 1982 signified the end of the United Kingdom's substantive role in our constitutional amendment process.

Indeed, Canada had acquired a great deal of independence long before 1982. Since the Statute of Westminster was proclaimed in Britain in 1931, the involvement of the British monarch in our domestic political affairs has been little more than ceremonial. Furthermore, in 1949, the practice of permitting final judicial appeals from the Supreme Court of Canada to the Privy Council of the British House of Lords was discontinued.

## CHARTER OF RIGHTS AND FREEDOMS

The introduction of the Charter of Rights and Freedoms in 1982 caused a legal revolution in Canada by giving courts the power to challenge laws made by Parliament, provincial legislatures and their delegates. For the first time, courts could review the conduct of government actions to ensure compliance with the individual rights and liberties enshrined in the Charter. At the same time, the Charter forced all governments across Canada to review their existing laws with an eye to bringing them into conformity with the Charter.

The Charter guarantees our freedom of conscience, religion, thought, expression, assembly and association. Certain democratic rights are also protected, including the right to vote in regular elections, the right to be eligible to hold elected office, and the right to move between provinces within Canada.

The Charter protects our right to be free from arbitrary detention and unreasonable search and seizure, to have a trial within a reasonable time, and to be presumed innocent until proven guilty. It also protects our right not to be deprived of life, liberty and security of person except in

## *Supreme Beginnings*

*When the Supreme Court of Canada's massive bronze doors first opened in 1940, the splendour of the building was so overwhelming, it inspired one stenographer to note: "Every time you come into this place, you have to shake yourself to realize you're not dreaming and that you're on your way to meet a typewriter instead of an Egyptian emperor."*

*Today, the Supreme Court stands as a chief symbol of Canada's judicial system and a tribute to the style of "monumentality" expressed by its designer, Ernest Cormier. Yet for this highest court of the land, such was not always the case.*

*The old Supreme Court building was to be found at the foot of Parliament Hill,*

*initially built as a carpenter's workshop and a stable. By the 1930s, its cracked walls and warped floorboards led one scribe to describe it as that "little continental church," and certainly it did have a classic touch of monastic poverty to its stained ceiling and faded red curtains.*

*In 1935, under the stewardship of the newly-elected prime minister William Lyon Mackenzie King, a site was chosen for a new Supreme courthouse on a bluff overlooking the Ottawa River. King chose Cormier, one of Canada's leading architects, to design and execute the building plans, and construction of the new \$3 million courthouse began in 1939. In fact, with her husband King George VI at her side, Queen Elizabeth*

*laid the very first cornerstone.*

*Yet, since nearly all office space had been pre-empted by wartime government staff, it wasn't until 1946 that the Supreme Court took up residence.*

*Once installed, it quickly emerged as a larger, more powerful judiciary. Before 1949, cases appearing before the Supreme Court could still be appealed to the Judicial Committee of the Privy Council in Great Britain. Amendments to the Supreme Court Act both closed this final avenue of appeal to England and enlarged the high Canadian court from seven judges.*

*Today, nine judges preside, including the chief justice. Just as their predecessors have done for more than a century, they still*



*enter the courtroom wearing red robes trimmed in ermine. They are appointed to these positions by cabinet on the advice of the prime minister.*

*Canada's Supreme Court hears an average of 120 cases a year. These are spread over three sessions: autumn, winter and spring. Judges do not usually sit in July, August and September. Neither do they hear every case that comes before them. Appeals are heard only if permission, or leave, to appeal is granted first and these cases generally involve questions of public importance or legal significance.*

*If the matter deals with constitutional law, leave to appeal is virtually guaranteed.*

*Within the framework of the new constitution and its Charter of Rights and Freedoms, the Supreme Court has played a paramount role in strengthening charter provisions. A 1988 ruling, for example, struck down the law restricting a woman's right to an abortion, and has had wide social and political implications.*

*Supreme Court proceedings are public. Like the Parliament Buildings, the Supreme Court is a monument to which the public is welcome. In 1996, more than 34,000*

*people passed through its vast marble hallways in guided tours.*

*In 1988, Cormier's building was classified by the federal government as a national heritage building. Between 1993 and 1995, it was renovated to meet new fire and safety standards, enlarge the library and replace the copper on its chateau-style roof.*

*The old Supreme Court building is now only a memory. In 1956, it was demolished to make way for a parking lot.*





Photo by Helmut Schade

*Veritas*, by sculptor Walter Allward, 1912, stands vigil outside the Supreme Court.

accordance with the principles of fundamental justice.

The Charter secures equality before the law for all Canadians, affirms the status of English and French as the official languages of Canada, and specifies a number of minority language education rights. Further, it instructs judges to interpret the Charter in a manner “consistent with the preservation and enhancement of the multicultural heritage of Canadians” and recognizes “any aboriginal treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada.”

The rights and freedoms enshrined in the Charter are subject to three important limitations. First, the Charter applies only to actions taken and laws made by governments (including federal, provincial/territorial and municipal governments). It is not intended to govern purely private activity between citizens, but rather as a bulwark against the abuses of state power.

Second, the rights are guaranteed subject to “such reasonable limits prescribed by law as can be demonstrably justified in a free and democratic society.” That is, reasonable limits may be put on these rights so long as the government can satisfy the courts that the objective in limiting them is important and justified.

The third limitation, the now famous “notwithstanding clause,” can be used by Parliament or a provincial legislature to immunize a law from Charter scrutiny by specifically declaring it to operate notwithstanding the provisions of the Charter.

## LEGAL INSTITUTIONS

Because Canada is a federal state, provincial governments do not derive their powers from the federal government. Instead, provincial powers are set out in the Constitution Act, 1867. As such, amendments to most of the Constitution require some measure of agreement among the federal and provincial legislatures. Within their own jurisdiction, however, provincial legislatures are generally free to create laws as elected officials see fit so



*Photo by David Trattles*

Members of the RCMP often stand guard at ceremonial events in Canada, such as this one—the opening of the Commissionnaire's residence, Dawson, Yukon.



long as they withstand the judgments of the court of public opinion.

Statutes passed by Parliament and provincial legislatures generally contain only the basic principles of laws. Detailed operational rules are often contained in subordinate legislation called regulations, which are usually designed and approved under the authority of Cabinet or the minister responsible for the corresponding legislation. Other subordinate

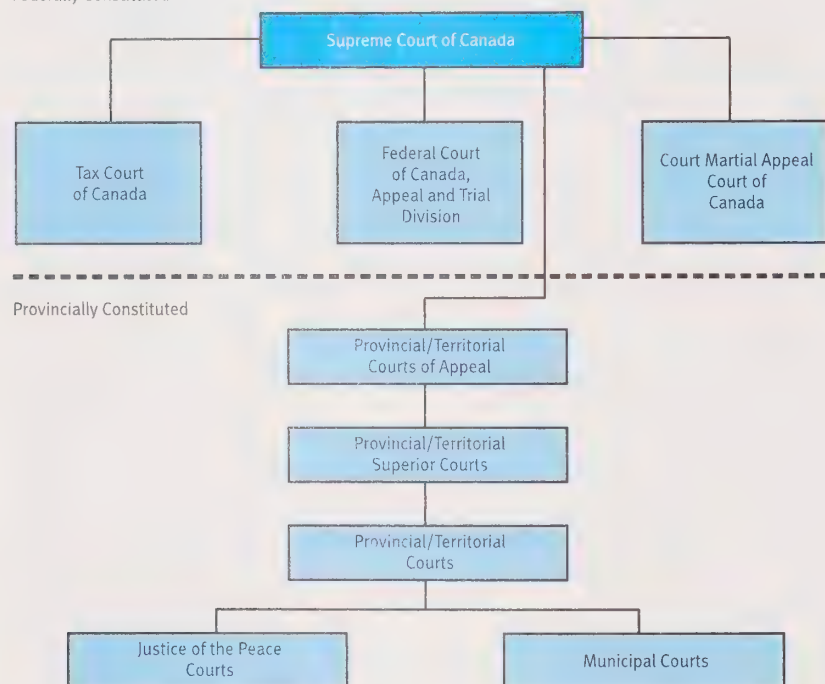
legislation is made by government agencies such as municipal councils or administrative tribunals.

The Supreme Court of Canada is the highest and final court of appeal in Canada to which decisions from the Federal Court of Appeal and the provincial appellate courts may be appealed. Although the names of courts established in each province may vary, they have essentially similar structures. Each province has an appeal court, a superior court and a so-called "provincial court," which deals with the bulk of criminal cases and most minor civil matters. Several provinces also have separate courts devoted exclusively to family law, youth justice, small claims, probate matters related to wills and estates, and so on.

Courts in more populated provinces have additional decision makers to accommodate the volumes of cases. For instance, Ontario's Divisional Court hears appeals that might go directly to the Court of Appeal in other provinces and Quebec has a Municipal Court to handle all matters respecting municipal by-laws. Most provinces' courts delegate judicial authority to registrars, masters, justices of the peace, and other court clerks to handle minor cases or procedural matters.

### Canada's Court System

Federally Constituted



### LEGAL AID

Retaining the services of a lawyer is an expensive proposition that is beyond the reach of many Canadians. Each province and territory has a system of legal aid to help low income Canadians obtain legal representation in criminal, family law and other matters. Funding is available to individuals whose household income falls within low income eligibility limits set by the provincial legal aid plan administrators. In 1995, the Federation of Law Societies of Canada reported that, as in most years during the past decade, about 25% of practising lawyers provided legal aid services to at least one client.



In 1995–96, Canadian legal aid programs spent \$622 million, a 4% decrease from the previous year. Most of the overall national decrease was due to substantial reductions in Alberta and Ontario legal aid budgets of 18% and 6%, respectively. Ontario's caseload declined by 21% in 1995–96—more than any other province—as a result of reductions to the income eligibility limits and the exclusion of a number of types of legal services previously funded by the plan.

## THE PRACTICE OF LAW

The Canadian legal system is home to two systems of law: the civil law tradition operating in Quebec and the common law system operating in the rest of Canada. Common law is guided by the principle of *stare decisis*, which allows judges to set new legal principles but requires them to follow relevant case precedents from superior courts. Quebec's civil law system requires judges to consult comprehensive lists of laws and regulations known as the Civil Code, but they are not obliged to follow the previous rulings of superior court judges.

The Canadian judicial process is an adversary system in which formal courtroom participation is generally limited to professional advocates, or lawyers. In 1995, there were more than 65,000 lawyers registered with provincial law associations in Canada. Although some lawyers specialize in certain areas of law, there is nothing preventing any licensed, insured lawyer from practising any type of law so long as he or she is competent to do so. Most provincial law societies, however, have standards for licensing lawyers as specialists in certain areas of law. Once called to the bar—admitted to the provincial law society—lawyers need not be recognized as specialists to provide legal services, but they must provide only services that they are competent to perform.

## PRIVATE LAW

Private law relates to the private interests of, or between, individuals. Generally, it includes the law of contracts, torts, property, business, wills and trust, and family law. Many aspects of private law may be governed by public statutes and address subjects with public policy implications. Nevertheless, private law generally relates to matters that do not, in any way, involve public benefits or government responsibilities except to help co-ordinate private interests.



*The Whyte Museum of the Canadian Rockies, NA 66-1691 (further details, see Appendix C)*

A still from the 1920 film *Sergeant Cameron of the Mounted*, filmed near Banff.

## *Facts of the Matter*

*Number of deaths due to  
suicide in 1995:* 3,749

*Number due to occupational  
injuries:* 724

*Number due to homicide  
by a family member:* 183

*Number due to homicide  
by an acquaintance:* 241

*Number due to homicide  
by a stranger:* 67

*Increase in national crime rate between  
1986 and 1996: 0.8%*

*Direction to travel from Ontario to find  
lower provincial crime rates in 1996: east  
Direction to travel to find lower  
unemployment rates: west*

*Estimated losses to the economy  
resulting from crime: 5% of gross  
domestic product*

*Estimated losses resulting from  
workplace injuries: 1%–4% of gross  
domestic product*

We often hear news stories about multi-million dollar judgments in American lawsuits. In Canada and the United States, general damage awards are calculated in roughly the same way and the legal systems in both countries permit the addition of so-called “punitive damage awards”—extra financial penalties imposed to punish the defendant rather than compensate the plaintiff.

Traditionally, however, Canadian courts have awarded punitive damages only in cases where the harm was caused by harsh and reprehensible behaviour by the injuring party. As such, Canadian plaintiffs can generally hope to only break even in pursuing a legal action and sometimes a successful claim for damages does not even cover the plaintiff’s legal expenses.

### **Civil Court Procedures**

The cost of filing or defending a court action in Canada is expensive and time consuming. Backlogged courts have caused such serious delays that provincial and federal ministries of justice have begun seeking new ways to resolve legal disputes.

For instance, in 1996, the Ontario Civil Justice Review recommended mandatory settlement conferences, mediation, and alternative dispute resolution. It also suggested that computers be used to streamline the court process, such as for electronically filing court documents. In Nova Scotia, small claims court sessions are being held in the evenings when courts are otherwise not in use. Quebec has introduced new fast-track procedures for matters involving amounts less than \$50,000.

## PUBLIC LAW

Public law and private law are not mutually exclusive. For instance, assault can result in public law sanctions (in the form of a criminal sentence for the accused) and private law remedies (in the form of a civil award of monetary damages to the victim). Generally, public law is a loose classification of law consisting of constitutional, administrative, criminal, taxation and public international law.

### Administrative Tribunals

Many laws are administered and enforced by administrative tribunals. Legislatures delegate legal authority to tribunals so elected officials do not have to formulate detailed policies and regulations that flow from the legislation they pass. Administrative tribunals can often draw on expertise of panel members that may not be available to traditional courts.

Administrative tribunals or boards can decide a range of issues from narrow, quasi-judicial determinations such as whether an individual will receive workers' compensation benefits or a broadcasting licence, to broad policy rulings such as whether to permit local competition in telephone service or increases in prescription drug prices.

There are nearly 1,800 administrative boards established by provincial law alone, two-thirds of which are law-making boards; the rest are merely advisory bodies. Provincial law-making boards deal with matters related to human rights, labour and employment standards, land assessment and expropriation, public utilities, transportation, financial institutions and securities, immigration, employment insurance, police and parole, consumer protection, parks, entertainment, and athletics.

*Number of adults who served sentences in Canadian prisons in 1996–97: 107,997*  
*Percentage of these inmates serving time for failure to pay a fine: 24%*

*Increase in total corrections population (in jail and on probation or parole) between 1987–88 and 1996–97: 38%*

*Average number of crimes reported each day in Canada in 1996:*

<i>Thefts under \$5,000:</i>	<i>2,257</i>
<i>Breaking and entering:</i>	<i>1,088</i>
<i>Assaults:</i>	<i>636</i>
<i>Motor vehicle thefts:</i>	<i>493</i>
<i>Impaired driving:</i>	<i>264</i>
<i>Drug offences:</i>	<i>180</i>
<i>Robberies:</i>	<i>87</i>
<i>Sexual assaults:</i>	<i>74</i>
<i>Homicides:</i>	<i>Less than 2</i>



## CRIMINAL LAW

The Criminal Code is the principal source of what we think of as criminal law in Canada. The Code prohibits a range of activities related to interference with property and violation of the safety or dignity of persons and community values. Most federal and provincial statutes are enforced by the threat of fines and imprisonment.

### Criminal Process

If a crime has been committed and reported to the police or it otherwise comes to their attention, the police, acting on behalf of the government, investigate it. Once the police uncover sufficient evidence to warrant a charge being laid, a Crown counsel (a lawyer acting on behalf of the gov-

ernment) then appears in court to prosecute the person accused of committing the offence. If the judge or jury finds the person guilty of the offence, the judge imposes a sentence.

Judges select sentences to deter further crime (by the public in general, and by the accused person in particular), to protect the public from the convicted person, to denounce the infringement on community values, and to rehabilitate the offender. The judge considers many factors, such as the severity of the crime and a host of personal characteristics of the accused, including his or her prior criminal record, before determining an appropriate sentence.

Possible sentences range from an absolute discharge (no penalty whatsoever) to incarceration. Many jurisdictions are now implementing diversion programs for non-violent offenders to bypass the criminal court procedure entirely.

## S O U R C E S

Canadian Legal Information Centre  
Department of Justice Canada  
Industry Canada  
National Crime Prevention Council  
Statistics Canada  
Treasury Board

### FOR FURTHER READING

Selected publications from Statistics Canada

- **Juristat.** Irregular. 85-002-XPE
- **A Graphical Overview of Crime and the Administration of Criminal Justice in Canada.** 1996. 85F0018XPE
- **Canadian Crime Statistics.** Annual. 85-205-XPE
- **Adult Correctional Services in Canada.** Annual. 85-211-XIB.
- **Crime and Police Resources in Canadian Municipalities.** Annual. 85-223-XPE
- **Youth Court Statistics.** Annual. 85-522-XPB

Selected publications from other sources

- **The Dollars and Sense of a Comprehensive Crime Prevention Strategy.** National Crime Prevention Council. 1997.

## The Legal System

### Legend

-- nil or zero

.. not available

x confidential

-- too small to be expressed

... not applicable or not appropriate

(Certain tables may not add due to rounding)

### 15.1 Justice Spending

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95
	\$ thousands					
<b>Justice spending<sup>1</sup></b>	<b>7,780,831</b>	<b>8,652,332</b>	<b>9,101,107</b>	<b>9,554,864</b>	<b>9,623,161</b>	<b>9,942,423</b>
Police <sup>2</sup>	4,684,760	5,248,530	5,426,887	5,716,833	5,790,165	5,783,656
Courts <sup>3</sup>	..	766,334	..	867,006	..	835,404
Prosecutions	..	..	..	..	..	257,855
Legal aid	341,388	412,072	513,953	602,128	594,939	646,433
Youth corrections	397,785	433,691	471,211	489,078	507,960	525,545
Adult corrections	1,653,785	1,791,705	1,872,371	1,879,819	1,878,892	1,893,530

1. In order to allow annual comparisons, court expenditures for 1989-90, 1991-92 and 1993-94 are estimated based on the average of the reporting years immediately preceding and following the reference period. These estimates are included in the total. Note that prosecution expenditures are included in the total for 1994-95 only.

2. Most municipal police forces report on a calendar year; all other data represent fiscal year reporting.

3. Figures for courts are collected every second year.

Source: Statistics Canada, Catalogue no. 85-002-XPE.

### 15.2 Police Personnel

	Police personnel	Police officers	Civilian personnel	Police/civilian ratio	Population per police officer	Criminal Code incidents per police officer <sup>1</sup>
1974	57,361	45,276	12,085	4	505	32
1979	63,991	48,990	15,001	3	496	38
1984	67,513	50,010	17,503	3	514	43
1989	73,759	54,233	19,526	3	505	45
1994	75,351	55,859	19,492	3	524	47
1995	74,267	55,008	19,259	3	538	48
1996	73,926	54,323	19,603	3	552	48

1. Data exclude Criminal Code traffic offences.

Source: Statistics Canada, Catalogue no. 85F0019-XPE.



## 15.3 Crimes

	1964	1974	1984	1991	1992	1993	1994	1995	1996
<b>All federal statute offences</b>	<b>659,829</b>	<b>1,559,864</b>	<b>2,239,494</b>	<b>2,992,707</b>	<b>2,951,533</b>	<b>2,840,725</b>	<b>2,746,887</b>	<b>2,737,388</b>	<b>2,744,890</b>
Criminal Code <sup>1</sup>	626,038	1,456,885	2,147,657	2,898,988	2,847,981	2,735,626	2,646,209	2,639,654	2,644,893
Crimes of violence	54,769	126,053	179,397	296,962	307,512	310,201	303,745	295,702	296,746
Murder	218	545	621	688	654	552	541	536	573
Attempted murder	121	521	922	1,044	1,054	984	922	939	878
Manslaughter	35	53	42	60	77	75	49	50	61
Robbery	5,666	16,955	23,310	33,236	33,201	29,955	29,010	30,332	31,797
Other violent crimes	48,729	107,979	154,502	261,934	272,526	278,635	273,223	263,845	263,437
Property crimes	414,048	946,793	1,408,663	1,726,769	1,674,773	1,599,037	1,524,519	1,550,725	1,561,811
Breaking and entering	97,224	233,362	356,912	434,602	427,153	406,421	387,867	390,784	397,057
Theft of motor vehicles	39,930	83,309	76,613	139,345	146,801	156,685	159,469	161,696	180,123
Theft	237,619	538,937	828,041	981,889	943,532	892,058	843,810	862,988	850,807
Possession of stolen goods	6,011	15,312	24,322	34,040	31,551	30,827	30,130	31,293	31,772
Fraud	33,264	75,873	122,775	136,893	125,736	113,046	103,243	103,964	102,052
Other crimes	157,221	384,039	559,597	875,257	865,696	826,388	817,945	793,227	786,336
Prostitution	2,054	3,249	1,024	10,567	10,137	8,517	5,575	7,170	6,397
Mischief	..	..	301,798	465,045	453,547	415,508	396,904	380,041	365,830
Offensive weapons	2,939	10,812	16,019	19,687	17,704	18,584	18,898	17,571	16,400
Other Criminal Code	152,228	369,978	240,756	379,958	384,308	383,779	396,568	388,445	397,709
Drugs	..	58,585	54,950	57,093	58,881	56,817	60,153	61,613	65,723
Other federal statutes	33,791	44,394	36,887	36,626	44,671	48,282	40,525	36,121	34,274

1. Criminal Code total excludes traffic offences.

**Sources:** Statistics Canada, CANSIM, matrix 2200 and Catalogue no. 85-205-XPE.

## 15.4 Traffic Offences

	1989	1990	1991	1992	1993	1994	1995	1996
<b>Traffic offences</b>	<b>412,575</b>	<b>398,831</b>	<b>393,052</b>	<b>390,456</b>	<b>365,649</b>	<b>321,881</b>	<b>292,693</b>	<b>266,501</b>
<b><i>Criminal Code</i> offences</b>	<b>236,530</b>	<b>227,201</b>	<b>226,070</b>	<b>219,693</b>	<b>197,825</b>	<b>186,435</b>	<b>173,884</b>	<b>162,462</b>
Dangerous operation of a:								
Motor vehicle	5,284	5,364	5,676	6,219	6,018	5,939	6,038	5,749
Motor vehicle causing death	219	222	186	198	170	171	170	132
Motor vehicle causing bodily harm	589	609	684	683	599	580	580	579
Boat, vessel or aircraft	174	169	129	121	165	151	152	146
Boat, vessel or aircraft causing death	21	25	15	13	19	19	16	20
Boat, vessel or aircraft causing bodily harm	29	26	32	28	32	39	24	27
Impaired operation of a:								
Vehicle causing death	186	166	171	161	168	133	176	173
Vehicle causing bodily harm	1,385	1,387	1,300	1,383	1,160	1,155	1,277	1,266
Vehicle with BAC <sup>1</sup> over 80 mg	128,744	124,306	126,903	119,884	107,194	98,363	93,660	88,444
Boat, vessel or aircraft causing death	22	15	7	21	14	16	36	22
Boat, vessel or aircraft causing bodily harm	85	121	80	64	82	30	36	30
Boat, vessel or aircraft with BAC <sup>1</sup> over 80 mg	267	328	361	240	221	228	193	162
Failure or refusal to provide a breath sample	13,187	12,246	11,484	10,284	8,432	7,510	6,657	5,989
Failure or refusal to provide a blood sample	507	509	421	382	303	333	250	194
Failure to stop or remain at the site of an accident	75,418	70,702	65,974	67,053	60,066	60,138	54,180	49,896
Driving a vehicle while prohibited	10,413	11,006	12,647	12,959	13,182	11,630	10,439	9,633
<b>Provincial statute offences</b>	<b>176,045</b>	<b>171,630</b>	<b>166,982</b>	<b>170,763</b>	<b>167,824</b>	<b>135,446</b>	<b>118,809</b>	<b>104,039</b>
Failure to stop or remain at the site of an accident	97,468	98,664	95,950	89,714	93,525	79,012	67,057	58,986
Dangerous driving	49,759	41,640	37,712	39,970	36,937	26,223	25,346	21,918
Driving while licence suspended	28,818	31,326	33,320	41,079	37,362	30,211	26,406	23,135

1. Blood alcohol concentration.

Source: Statistics Canada, CANSIM, matrix 310.

## 15.5 Youths and Adults Charged

	1986	1992	1993	1994	1995	1996
<b>All persons charged</b>	<b>551,030</b>	<b>668,339</b>	<b>639,667</b>	<b>597,819</b>	<b>583,274</b>	<b>583,513</b>
Adults charged	438,003	527,961	506,684	470,724	454,465	454,971
Male	367,819	435,027	417,134	390,491	376,269	376,236
Female	70,184	92,934	89,550	80,133	78,196	78,735
Youths charged	113,027	140,378	132,983	127,095	128,809	128,542
Male	94,691	112,397	105,570	101,596	101,407	100,654
Female	18,336	27,981	27,413	25,499	27,402	27,888
<b><i>Criminal Code</i><sup>1</sup></b>						
<b>All <i>Criminal Code</i></b>	<b>501,748</b>	<b>610,248</b>	<b>583,128</b>	<b>542,134</b>	<b>529,454</b>	<b>526,304</b>
Adults charged	392,742	474,935	456,241	422,509	408,791	409,894
Male	327,776	390,245	373,948	349,210	337,061	337,435
Female	64,966	84,690	82,293	73,299	71,730	72,459
Youths charged	109,006	135,313	126,887	119,625	120,663	119,410
Male	91,196	108,340	100,567	95,430	94,649	93,187
Female	17,810	26,973	26,320	24,195	26,014	26,223
Violent crime	87,957	145,354	150,330	147,071	139,850	139,767
Adults charged	78,682	125,326	128,853	125,442	117,409	117,246
Male	71,082	111,693	114,144	110,147	103,051	102,393
Female	7,600	13,633	14,709	15,295	14,358	14,853
Youths charged	9,275	20,028	21,477	21,629	22,441	22,521
Male	7,547	15,734	16,381	16,749	17,288	17,206
Female	1,728	4,294	5,096	4,882	5,153	5,315
Property crime	268,243	280,944	256,201	230,655	227,233	229,648
Adults charged	189,381	197,341	181,220	161,748	159,128	162,946
Male	148,201	150,191	136,982	124,273	122,940	125,861
Female	41,180	47,150	44,238	37,475	36,188	37,085
Youths charged	78,862	83,603	74,981	68,907	68,105	66,702
Male	65,912	66,565	59,232	54,656	52,956	51,930
Female	12,950	17,038	15,749	14,251	15,149	14,772
Other <i>Criminal Code</i> offences	145,548	183,950	176,597	164,408	162,371	159,889
Adults charged	124,679	152,268	146,168	135,319	132,254	129,702
Male	108,493	128,361	122,822	114,790	111,070	109,181
Female	16,186	23,907	23,346	20,529	21,184	20,521
Youths charged	20,869	31,682	30,429	29,089	30,117	30,187
Male	17,737	26,041	24,954	24,027	24,405	24,051
Female	3,132	5,641	5,475	5,062	5,712	6,136
<b>Other federal statutes</b>	<b>49,282</b>	<b>58,091</b>	<b>56,539</b>	<b>55,685</b>	<b>53,820</b>	<b>54,209</b>
Adults charged	45,261	53,026	50,443	48,215	45,674	45,077
Male	40,043	44,782	43,186	41,281	39,208	38,801
Female	5,218	8,244	7,257	6,834	6,466	6,276
Youths charged	4,021	5,065	6,096	7,470	8,146	9,132
Male	3,495	4,057	5,003	6,166	6,758	7,467
Female	526	1,008	1,093	1,304	1,388	1,665

1. *Criminal Code* excluding traffic offences.

Source: Statistics Canada, CANSIM, matrices 2198 and 2199.



15.6 Youth Courts Dispositions<sup>1</sup>

	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
	Cases					
<b>All dispositions</b>	<b>76,927</b>	<b>77,256</b>	<b>78,010</b>	<b>73,969</b>	<b>72,945</b>	<b>74,797</b>
Secure custody	9,908	11,301	11,874	11,616	10,850	11,772
Open custody	12,917	13,153	14,071	13,596	13,462	13,506
Probation	32,216	37,931	37,830	35,627	35,783	37,960
Fine	6,126	5,299	5,158	4,472	4,226	3,574
Community service order	9,497	5,204	4,813	4,866	5,020	4,594
Absolute discharge	3,179	2,888	2,697	2,413	2,094	1,464
Other dispositions <sup>2</sup>	3,084	1,480	1,567	1,379	1,510	1,927

1. From April 1 of one year to March 31 of the next year.

2. Includes dispositions such as detention for treatment, compensation, pay purchaser, compensation in kind, restitution, prohibition, seizure, forfeiture, essays, apologies and counselling programs.

Sources: Statistics Canada, CANSIM, matrix 8907 and Catalogue no. 85-522-XPE.

15.7 Inmates in Federal Custody<sup>1</sup>

	1991	1992	1993	1994	1995	1996
<b>Canada</b>	<b>11,783</b>	<b>12,342</b>	<b>13,322</b>	<b>13,948</b>	<b>14,055</b>	<b>14,143</b>
Atlantic	1,058	1,173	1,419	1,409	1,419	1,392
Quebec	3,431	3,646	3,748	3,825	3,869	3,768
Ontario	3,343	3,552	3,858	3,781	3,699	3,695
Prairie	2,372	2,422	2,773	3,041	3,142	3,384
Pacific	1,579	1,549	1,524	1,892	1,926	1,904

1. Average counts prior to 1993 were based on 52 weekly counts. Starting in 1993, the count is based on a snapshot taken on March 31.

Sources: Statistics Canada, CANSIM, matrix 313 and Catalogue no. 85-211-XPE.

## 15.8 Inmates in Provincial Custody

	1986	1991	1992	1993	1994	1995	1996
<b>Canada</b>	<b>15,787</b>	<b>18,940</b>	<b>19,367</b>	<b>19,481</b>	<b>19,811</b>	<b>19,730</b>	<b>20,024</b>
Newfoundland	266	354	410	380	393	355	313
Prince Edward Island	97	108	115	96	95	107	90
Nova Scotia	384	396	395	436	439	407	405
New Brunswick	388	416	464	466	429	411	400
Quebec	2,581	3,344	3,556	3,545	3,553	3,470	3,425
Ontario	5,642	7,381	7,421	7,254	7,282	7,356	7,766
Manitoba	859	959	939	893	941	972	985
Saskatchewan	1,176	1,315	1,198	1,214	1,240	1,267	1,175
Alberta	2,264	2,430	2,584	2,718	2,712	2,550	2,470
British Columbia	1,837	1,895	1,927	2,113	2,361	2,434	2,584
Yukon Territory	73	84	80	73	69	84	70
Northwest Territories	220	259	278	293	297	317	341

Source: Statistics Canada, CANSIM, matrix 312.





## APPENDIX A

### REGIONAL REFERENCE CENTRES

Telecommunications Device for the Hearing-Impaired 1 800 363-7629  
Toll Free Orders Only Line (Canada and the United States) 1 800 267-6677  
National Inquiries Line: 1 800 263-1136  
National Capital Region Internet: [infostats@statcan.ca](mailto:infostats@statcan.ca)

### ATLANTIC REGION

Serving the provinces of Newfoundland and Labrador, Nova Scotia,  
Prince Edward Island and New Brunswick.

#### STATISTICS CANADA

Advisory Services  
1741 Brunswick Street  
2<sup>nd</sup> Floor, Box 11  
HALIFAX, Nova Scotia  
B3J 3X8

Local calls: (902) 426-5331      Fax: (902) 426-9538

### QUEBEC REGION

#### STATISTICS CANADA

Advisory Services  
200 René Lévesque Boulevard West  
Guy Favreau Complex  
East Tower, 4<sup>th</sup> Floor  
MONTRÉAL, Quebec  
H2Z 1X4

Local calls: (514) 283-5725      Fax: (514) 283-9350

### NATIONAL CAPITAL REGION

#### STATISTICS CANADA

Statistical Reference Centre  
R.H. Coats Building Lobby  
Holland Avenue  
OTTAWA, Ontario  
K1A 0T6

Local calls: (613) 951-8116      Fax: (613) 951-0581

### ONTARIO REGION

#### STATISTICS CANADA

Advisory Services  
Arthur Meighen Building  
25 St. Clair Avenue East, 10<sup>th</sup> Floor  
TORONTO, Ontario  
M4T 1M4

Local calls: (416) 973-6586      Fax: (416) 973-7475

### PRAIRIE REGION

#### STATISTICS CANADA

Manitoba  
Advisory Services  
VIA Rail Bldg., Suite 200  
123 Main Street  
WINNIPEG, Manitoba  
R3C 4V9

Local calls: (204) 983-4020      Fax: (204) 983-7543

**STATISTICS CANADA**

Saskatchewan  
Advisory Services  
Park Plaza, Suite 440  
2365 Albert Street  
REGINA, Saskatchewan  
S4P 4K1

Local calls: (306) 780-5405      Fax: (306) 780-5403

**STATISTICS CANADA**

Northern Alberta and Northwest Territories  
Advisory Services  
10001 Bellamy Hill,  
Park Square, 9<sup>th</sup> floor  
EDMONTON, Alberta  
T5J 3B6

Local calls: (403) 495-3027      Fax: (403) 495-5318

**STATISTICS CANADA**

Southern Alberta  
Advisory Services  
Discovery Place, Room 201  
3553-31 Street N.W.  
CALGARY, Alberta  
T2L 2K7

Local calls: (403) 292-6717      Fax: (403) 292-4958

**PACIFIC REGION**

Serving the province of British Columbia and the Yukon Territory.

**STATISTICS CANADA**

Advisory Services  
Library Square Tower  
Suite 600-300 West Georgia Street  
VANCOUVER, British Columbia  
V6B 6C7

Local calls: (604) 666-3691      Fax: (604) 666-4863

APPENDIX B

METRIC CONVERSION

In view of the degree of metric conversion in Canada, almost all quantities in this edition of the *Canada Year Book* appear only in the International System of Units (SI) metric or in neutral units such as dollars or dozens.

It is a requirement in SI metric to use spaces instead of commas to separate groups of three digits; a space is optional with a four digit number. In all Statistics Canada publications, a period is used as a decimal marker.

Relative weights and measures:  
SI Metric, Canadian Imperial and United States units

AREA

1 sq. km	
(square kilometre)	= 0.39 square miles
1 ha (hectare)	= 2.47 acres
	= 10 000 sq. m
100 ha	= 1 sq. km

LENGTH

1 m (metre)	= 39.37 inches
	= 3.28 feet
	= 1.09 yards
1 km (kilometre)	= 0.62 statute miles
	= 0.54 nautical miles

VOLUME AND CAPACITY

1 L (litre)	= 0.04 cubic feet
	= 0.42 board feet (four lumber)
	= 0.03 Canadian bushels (for grain)
	= 0.22 Canadian gallons
	= 35.20 fluid ounces
	= 0.88 quarts
	= 1.76 pints
	= 0.26 U.S. gallons
	= 1.06 U.S. quarts
	= 2.11 U.S. pints
1 cu. m (cubic metre)	= 6.29 barrels (oil barrel: 42 U.S. gallons)
	= 0.35 register tons (in shipping)*
	= 35.32 cubic feet
	= 1000 cu. dm

MASS WEIGHT

1 g (gram)	= 0.04 ounces (avoirdupois)
	= 0.03 ounces (troy or apothecary)
1 kg (kilogram)	= 2.21 pounds (avoirdupois)
	= 1.10 tons (short)
	= 0.98 tons (long)

LENGTH AND MASS

1 t-km (tonne-kilometre)	= 0.69 short ton miles
--------------------------	------------------------



**VOLUME AND MASS**

1 cu. m of water weighs 1 tonne (approximate)

**TEMPERATURE**

Fahrenheit temperature = 1.8 (Celsius temperature +32)

Celsius temperature = 5/9 (Fahrenheit temperature -32)

At sea level, water freezes at 0 °C (32 °F) and boils at 100 °C (212 °F) (approximate).

**ENERGY**

1 kJ (kilojoule) = 0.95 British thermal units (BTU) (mean)

1 MJ (megajoule) = 0.37 horsepower-hours

1 MJ = 0.28 kilowatt-hours

1 PJ = 1 000 000 000 MJ

**CONVERSION EXAMPLE**

If converting from metres to feet where:

$$1 \text{ m} = 3.281 \text{ feet}$$

multiply the number of metres by 3.281 to get the number of feet.

10 metres = 10 times 3.281 or 32.81 feet.

If converting from feet to metres where:

$$1 \text{ m} = 3.281 \text{ feet}$$

divide the number of feet by 3.281 to get the number of metres.

10 feet = 10 divided by 3.281 or 3.05 metres.

\* *Gross register tonnage of ship, as used by Lloyd's Register of Shipping, is a measurement of the total capacity of the ship and is not a measure of weight. Net register tonnage equals gross register tonnage minus space used for accommodation, machinery, engine area and fuel storage, and this is how the cargo-carrying ability of a ship is calculated.*

## APPENDIX C

### PHOTOGRAPHS AND ARTWORK

#### The Land – Chapter 1

##### Cougar.

Photographer: Thomas Kitchin/First Light

##### Manitoba Flood, Summer 1997.

Photographer: Tom Thomson

#### The Legacy of Settlement – Chapter 2

##### Crossing Frobisher Bay, Baffin Island.

Photographer: Jerry Kobalenko/Tony Stone

#### The Population – Chapter 3

##### Untitled (young girl dancing).

Photographer: Rod Currie/Tony Stone

#### Health – Chapter 4

##### The marsh at Point Pelee, Ontario.

Photographer: Carl Hiebert

##### Canadian AIDS Memorial Quilt.

Sections 15 and 29 from the quilt, part of the NAMES Project Canada, an organization to manage a collection of more than 570 cloth panels sewn by friends and relatives to honour those who have died of AIDS. The quilt tours the country, with various sections on display in gymnasiums and other public places.

##### Opium

Artist: Shelagh Keeley

Published in *Bound by Contradiction*, Kamloops Art Gallery, 1993

#### Education – Chapter 5

##### Rachel, grade one Hutterite student, Pincher Creek, Alberta.

Photographer: William DeKay

On the boy's side, in an Acadian School, La Meque, Shippegan Island, New Brunswick.

Photographer: Edith S. Watson

Published in *Working Light: The Wandering Life of Photographer Edith S. Watson*, by Frances Rooney, Carleton University Press, 1996

#### Household and Family Life – Chapter 6

##### Jennifer's step, Barnaby River, New Brunswick.

Photographer: David Trattles

*Springfield on the Credit*, 1884, oil on canvas

Artist: Charlotte Schrieber

Private collection, photo by T.E. Moore, courtesy of the Robert McLaughlin Gallery

#### The Labour Force – Chapter 7

##### Cultivating cranberries in Richmond, B.C.

Photographer: Kaj Svensson/Viewpoints West

##### Motor products employees, the machine shop, ca. 1938.

Courtesy of the CAW Family Education Centre, Active Archive

*The Ice Harvest*, Québec, 1934, oil on canvas

Artist: Clarence Gagnon

Private collection, photo by T.E. Moore, courtesy of the Robert McLaughlin Gallery

#### Arts and Leisure – Chapter 8

##### Hogs Back Falls, Rideau River, Ottawa.

Photographer: J. David Andrews

#### The Economy – Chapter 9

*Sir Wilfrid Laurier* (detail), 1982

Artist: William Ronald

Collection of the Kitchener-Waterloo Art Gallery; gift of Mr. Irving Zucker, 1995

Photographer: Robert McNair

This painting, in memory of Sir Wilfrid Laurier, is part of William Ronald's series entitled "The Prime Ministers," painted in the 1970s and 1980s. In describing this work, Ronald wrote: "The centre circular motion is tumultuous and has to do with the formation of the country... it (is) like the formation of a planet; massive undercurrents merging together with great forces. There is darkness, too, marking the struggles of (Laurier's) final years. I intended the frame to be an integral part of the painting, like architecture, as Laurier was a national figure in the fullest sense, a unifier and builder." William Ronald passed away in 1998.

### Primary Industries – Chapter 10

**Potato fields, Prince Edward Island.**

Photographer: Lionel F. Stevens

Copyright 1997 Camera Art – Charlottetown

**Canadian Harvesting Scene, Shaving Immense Field of Wheat, n.d.**

Published by Valentine and Sons, Montréal/Toronto, colour postcard, University of Saskatchewan Libraries, Special Collections Department

**Man in boat, 1985**

Artist: Conrad Furey

Carleton University Art Gallery; gift of Malcolm and Donna Welch, 1985

### Manufacturing and Construction – Chapter 11

**Mennonite Barnraising, Dorking, Ontario.**

Photographer: Carl Hiebert

### Communications, Transport and Trade – Chapter 12

**Ice Breaker, Hudson Bay, Manitoba.**

Photographer: David Hiser/Tony Stone

**The Mail Carrier at Point au Baril on Georgian Bay, circa 1916.**

Photographer: Edith S. Watson

Published in *Working Light: The Wandering Life of Photographer Edith S. Watson*, by Frances Rooney, Carleton University Press, 1996

**Bridge II (2<sup>nd</sup> State), 1983**

Artist: Hugh Mackenzie

Carleton University Art Gallery; gift of Hugh Mackenzie, 1993

### Finances and Services – Chapter 13

**Banff Springs Hotel, Banff National Park, Alberta.**

Photographer: Miles Ertman/Masterfile

**Gus Risto, Woodworker.**

Photographer: Steve Evans

Published in *Heart & Soul: Portraits of Canada's Ottawa Valley*, General Store Publishing House Inc, Burnstown, 1987

### The Government – Chapter 14

**Peace Tower (detail).**

Photographer: Malak

**The Painted Flag, 1988, acrylic on canvas, 152 x 121 cm**

Artist: Charles Pachter

Collection Canadian Embassy, Washington; gift of the Onex Corporation

### The Legal System – Chapter 15

Photographer: Robert Karpa/Masterfile

**Law books.**

**Sergeant Cameron of the Mounted Police, 1920, film still, Bankhead, Alberta.**

Whyte Museum of the Canadian Rockies, NA66-1691



## APPENDIX D

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# Canada

Scale 1:20 000 000 or 1 centimetre represents 200 kilometres

200 0 200 400 600 km



CANADA - 1:20 000 000

## BOUNDARIES

- Federal Capital
- Provincial Capital
- Other Populated Places

- International
- Provincial and Territorial
- District
- Unsurveyed
- Dividing Line - Canada and Greenland

## TRANSPORTATION

- Trans-Canada Highway
- Principal Roads
- Ferry
- Railway

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